THE LANCET.

LECTURES

ON THE

ANATOMY, PHYSIOLOGY, AND DISEASES OF THE EYE.

By MR. LAWRENCE.

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LECTURE I.

Gentlemen,

The object of these lectures is to make you acquainted with the nature and treatment of diseases of the eye, including, under that expression, not only the globe itself, but the several auxiliary parts, called its appendages. The anatomy and physiology of the organs will be only considered shortly, and in reference to the practical part of the course.

It is hardly necessary to enlarge on the importance of the subject, or to prove to you formally how indispensable it is that you should become acquainted with it. Every one feels that sight is the most valuable of our senses; that it not only is, in itself, the most important inlet of knowledge—the most indispensable medium of our communication with surrounding persons and objects, but also that it is essential to the full enjoyment of our other senses—to the free exercise of almost all our other faculties and endowments; so that these latter lose more than half their value when sight is gone. Hence blindness is one of the greatest calamities that can befal human nature short of death; and many think that the termination of existence would be preferable to its continuance in the solitary, dependent, and imperfect state to which human life is reduced by the privation of this precious sense.

Loss of sight is the greatest misfortune even to the rich, who can alleviate it by purchasing the aid and services of others. How much more severely must it be felt by the poor, by the middle and lower classes of society, *i.e.* by 49-50ths of mankind; who, being rendered incapable of labour, and having their minds uncultivated, find their existence reduced to a dreary blank—dark, solitary and cheerless—burthensome to themselves and to those around them. Even our great poet, who might have been supposed to find every alleviation and resource that such an affliction admits of, in his highly-gifted mind, and the exhaustless stores of knowledge with which it was furnished, repeatedly reverts to his blindness, and always in a tone of anguish and despondency characteristic of recent misfortune:—

"Thus with the year
Seasons return; but not to me returns
Day, or the sweet approach of eve or morn,
Or sight of vernal bloom, or summer's rose,
Or flocks, or herds, or human face divine;
But cloud instead, and ever-during dark
Surround me, from the cheerful ways of men
Cut off, and for the book of knowledge fair
Presented with a universal blank
Of Nature's works, to me expunged and rased,
And wisdom at one entrance quite shut out."

It often depends on the surgeon whether the patient shall retain or lose, recover or remain bereft of vision.

Common external inflammation of the eye, if neglected or improperly treated, by rendering the transparent anterior portion of the organ more or less opaque, proportionally injures vision; inflammation of the iris, when unchecked, causes contraction of the pupil and deposition of lymph in the aperture, which prevents the passage of light into the eye.

Affection of the nervous structure, if not arrested in its beginning, terminates inevitably in diminution or loss of sight; and these distressing results are too often advanced by some plans of treatment, which have been pretty generally followed, and might plead the sanction of names that have enjoyed public confidence.

The success of operations for cataract, or artificial pupil, depends entirely on the knowledge, discrimination, and dexterity of the operator. Now, none of these are rare cases. They are matters of daily occurrence, and make up the bulk of ophthalmic practice.

The heavy responsibility, which this view of the subject unfolds, will compel every conscientious man to turn his most anxious attention to the affections of this delicate and important organ, and to embrace every opportunity of acquiring the knowledge which will enable him to act decisively and effectually on occasions of such momentous consequence.

If there are any to whom the pleasure connected with the acquisition of knowledge—the satisfaction flowing from the consciousness of important duties rightly performed, and the gratitude so warmly expressed for the inestimable benefits of averting blindness, or restoring sight, should not prove an incentive sufficiently powerful to the study of ophthalmic medicine and surgery, their case must be deemed desperate; unless, indeed, their minds, insensible to higher feelings and nobler motives, should obey the impulse of self-interest and fear; unless they should be scared by the frightful prospect of disgrace and ruin, which ignorance and its inseparable blunders must entail. The consequences of wrong treatment cannot be concealed here, as in the obscure affections of internal organs; the visible changes of structure are obvious to external observation, and the unfortunate individual whose sight is injured or destroyed by unskilful treatment, serves as a lasting memorial of the incapacity and rashness to which he owes his misfortune. The study of diseases of the eye is therefore now justly regarded as an essential part of general medical education; but it is more particularly so to country practitioners, who are thrown entirely on their own resources; who cannot, as in the metropolis, and some large cities, call in the aid of superior talent and knowledge.

A country surgeon often gains much reputation by an operation on the eye, or a case of serious disease successfully managed. On the other hand how must he be mortified if obliged to confess his ignorance; or, if he does not like that, with what fear and trembling must he undertake a case, when conscious that he is ignorant of the nature and treatment of the affection, and that he is constantly liable to commit some great blunder.

Admitting the importance of the subject, you will, perhaps, doubt whether or not it ought to be separated from the rest of surgery. You may probably inquire, Are not ophthalmic patients received into general Hospitals? and are not diseases of the eye included in general courses of surgery? Both questions may be answered in the affirmative. But the eye-cases in these Hospitals are few; and hence totally inadequate to the purposes of practical study; particularly for exemplifying the various operations. Thus these institutions have been altogether inefficient in reference to this important department of surgery.

As the general body of surgeons was ignorant of this branch, the public naturally resorted to *oculists*, who, seeing eye-cases in greater numbers, became better acquainted with the symptoms, diagnosis and treatment; and especially more skilful in the operative department.

At the same time, the subject being imperfectly understood, was slurred over and neglected in the general surgical courses. Perhaps two or three lectures have been devoted to ophthalmic diseases and operations; many important affections must consequently have been entirely unnoticed, and the whole very inadequately explained.

Thus students, who resorted to London for the completion of their professional studies, had really no means of learning this important department of the profession, which was tacitly abandoned, even by the Hospital surgeons, and turned over to the oculists, who not being conversant with the principles derived from anatomy, physiology, and general pathology, attended merely to the organ, and relied almost exclusively on what is really of very little importance—local treatment.

Hence ophthalmic surgery, being in a manner dismembered from the general science, was reduced to a very low ebb. Until within a very few years, it was in this country, at least, in a state of almost total darkness.

Thus it became necessary to establish an express and distinct school for ophthalmic surgery; not because the principles of treatment differ from those applicable to surgical disease in general; nor because any peculiar mode of study is required; but in order to supply a deficiency in the existing sources of professional instruction;—to provide, for the diseases of this very important organ, those means of information which the general Hospitals neither do, nor could provide consistently with the requisite attention to their other important objects.

This means, which at first view, seems calculated to complete and perpetuate the separation, was the only rational mode o

reuniting ophthalmic practice to general surgery.

It has been the object of this infirmary to apply the general principles of medicine and surgery to the elucidation and treatment of diseases of the eye. Hence it is a law of the establishment, that the medical officers of the institution shall be selected from those who have been regularly educated as physicians and surgeons.

The great field of observation which it affords has been thrown open to the public; thus enabling the general body of the profession, and particularly medical students, to acquire easily, and in a short time, a full knowledge of this department. The opportunities afforded here are not intended nor calculated to make *oculists*; but to impart to surgeons and physicians a knowledge of ophthalmic disease.

Nearly 4000 patients are annually entered on the books of the institution. Here you may soon become familiar with all forms of disease, and with the effects of treatment. The numerous cases brought together, afford the greatest facilities for comparing or contrasting the several affections. The important subject of diagnosis, may here be studied in the book of nature, which never deceives or misleads us. In short, you may see more of diseases of the eye in this institution in three months, than in the largest Hospital in fifty years. The greatest number of those who come here are out-patients, who attend three days in the week, and the mode of procedure is as follows. When a patient presents himself he is examined, and the nature of his complaint is explained by my colleague or myself to those gentlemen who may be attending; the reasons on which the treatment is founded are mentioned; the name, the disease, and the prescriptions are written on a paper, which the patient brings with him at each visit, so that by just throwing the eye over it, the practice adopted from the beginning of the case may be seen; cases requiring operations, and some instances of severe and urgent disease are received as in-patients.

You may doubt whether the affections of the eye afford matter for a course of Lectures, and ask, if this single organ has a set of lectures appropriated to it, what will be required for the whole body? The eye, although small in bulk, is complicated in structure. It is made up of several distinct or dissimilar tissues, and it exhibits all the affections to which each of these is liable. Although its component structures are for the most part analogous to what we meet with in other parts of the body, and consequently must be subject to morbid affections essentially similar to those occurring elsewhere, yet the office and form of the organ, the union of its component parts, and the nature of many of them, are so peculiar, as to give a strong character of individuality to its diseases. We do not, at the first view, recognize in affections of the eye the same diseased processes with which we are familiar in other parts; we seem to be contemplating something peculiar and individual, and this more especially in the diseases of the peculiar tissues. This individual and distinct character of ophthalmic diseases both accounts for their having been detached and considered as a separate branch of surgery, and, in conjunction with their number, justifies us in appropriating to them a distinct course of Lectures. It is by no means necessary to expand or spin out the subject for this purpose; my aim, on the contrary, will be to bring it into as small a compass as possible, consistently with the main object of adequately elucidating the nature and treatment of ophthalmic disease. I shall give you about thirty lectures, which you will consider a very moderate allowance, when I inform you that professor Beer, of Vienna, occupied in his course of instruction ten months, giving five or six lectures weekly. His course, too, seems to have been principally on the practical part of the subject, for he is styled professor of practical ophthalmology, while another celebrated man, Prochaska, was professor of general ophthalmology in the same school.

The course of proceeding necessary to be adopted in learning the diseases of the eye, must be the same as that for diseases in general. The art of healing, or medicine, taken in its most extensive sense, is founded on the sciences of anatomy, physiology, pathology, and therapeutics, in other words, a knowledge of the healthy structure and function must be first obtained, and then a knowledge of diseased structure and function, and, lastly, a knowledge of the external agencies capable of influencing the body, so as to induce disease or restore health.

The more thoroughly any organ has been investigated, anatomically, physiologically, and pathologically, the better shall we be prepared to treat its diseases. In this respect the eye is advantageously circumstanced; its anatomy is well known; its physiology clearly made out. A considerable portion of the organ is external, and the transparency of the front enables us to see much of its interior. We can observe the phenomena of disease, and the effect of remedies on its

internal structure: we can see these processes actually going on in such parts as are elsewhere hidden from our view. The observations thus made on the eye are applicable to the illustration of disease and treatment in other organs. Hence if the general principles of medical science throw light on ophthalmic affections, the history and progress of the latter reciprocally afford valuable data for general pathology.

But can the diseases of any organ be well studied alone? Can they advantageously be made the subject of detached and separate investigation and treatment? Each organ of the body has its own structure, and its own office. But it is organically connected to the surrounding parts, and it does not perform its office independently of the rest; on the contrary, the several parts, whose assemblage composes an animal, concur, each in its own way, in one general effect—the life of the individual. Hence they are united by numerous connexions, and exercise over each other, almost universally, more or less powerful influence.

There is a common source of nutrition, a common centre of circulation, and of nervous energy for the whole body. Besides these, there are numerous mutual influences, from contiguity of position, connexion of structure, similarity of organisation, and relation of different functions; besides the obscure mutual operations, called sympathies, so well known in their effect, but not yet clearly made out in cause and mode of influence. Hence the individual organs are not independent. The causes of their natural functions, and of those deviations which constitute disease, are not to be found within themselves, but mostly in the state of the constitution, or in that of some leading system of organs.

Hence, in order to understand any part of the body, you must know the whole; and this holds equally good in disease as in health. Suppose a person complains of dimness or weakness of sight, we shall not be able to treat the case locally, for probably there may be no visible alteration in the organ, indeed no local indication. We must look to the state of the circulation in the head, to the condition of the digestive organs; we must inquire into the patient's habits, into his diet, into his general mode of living, as well as into the causes which may be acting on the eye. Until this analysis has been made, you cannot know the causes of disease, nor can you arrive at clear grounds of treatment. You ultimately find that the eye must be cured, not by any direct measures, but by those of general influence—by loss of blood, purging, change of diet.

In such a system then, of intricate connexion and mutual influence, each part will be best understood by those who have the clearest notions of the general economy. Even the practical treatment is most judiciously conducted by those who are in the habit of treating disease generally; who do not confine their attention to the part. This confinement is prejudicial, by producing and confirming habits of partial and narrow views, by leading to neglect of mutual relationsand influences, by encouraging local treatment. Exclusive attention to a small corner of the animal structure, causes a confinement of mental vision, analogous to the nearsightedness which mechanics contract by constantly poring over the minute objects of their attention. All the habits of the oculist lead to a separation and insulation of the organ. The part is detached from the system, treated by washes, drops, ointments; and this absurd trifling supersedes the art and science of ophthalmic surgery.

We want, instead of this, general and comprehensive views, the aid of analogy and contrast; the whole field of medicine and surgery must be laid under contribution, for the principles which are to guide us in learning the nature and treatment of ophthalmic disease. Professed oculists have done nothing for the science, either here or abroad. We have had many in England: they have been active enough too; but their writings are of little or no value. The only real and valuable improvements have proceeded from men of extensive anatomical knowledge, and of great general insight into disease.

A question has been raised, whether a minute knowledge of anatomy is necessary to physicians or surgeons? and pains have been taken to show that it is not. The persons who have given themselves this trouble seem to have been afraid that physicians and surgeons would study anatomy too deeply; would overburthen themselves with it, and fill their heads so full as not to leave room for other matters. My acquaintance with the profession has not inspired me with the smallest apprehension of the kind.

We may leave this point, so far as physicians are concerned, to be settled among themselves, observing only, that if they should decide the question against the necessity of anatomical knowledge, they had better not publish their decision. If a man who undertakes to cure the defects and disorders of a machine, says that his remedies are of such a kind as not to require any acquaintance with

the construction of that machine, we should not have much confidence in his proceedings.

We come to surgery; but I will not degrade myself, and insult you, by coolly calculating with how small a stock of scientific knowledge it might be possible to carry on the trade of surgery. The health, the limbs, the lives of our fellow creatures are entrusted to our care, with a confidence in our knowledge, skill, and humanity; our utmost exertions, and most anxious toil after information, will not do more than enable us to justify such confidence. What kind of feelings—what conscience can the man possess, who can plunge an instrument into the human body without knowing what he may divide or injure?—who can operate without that full anatomical knowledge that will enable him to meet every emergency? How could he bear his own reflections, if he should see a patient, seriously and permanently injured, in consequence of his ignorance and rashness? and all this vexation, shame and remorse to be encountered, to save a little trouble in the study of his profession! At all events minute anatomical knowledge is necessary to an acquaintance with diseases of the eye, especially in the important subject of diagnosis, and in operations.

It is the custom to give, in an Introductory Lecture, an historical sketch of the science: this part of the subject will not detain us long. You may be rather surprised at finding that the separation of the ophthalmic department from the rest of surgery is very ancient, and is, perhaps, coeval with the origin of medicine itself. Among the Egyptians, to whom we trace most of our arts and sciences, it was preserved as a distinct branch of practice; among them each class of diseases had its physician, and we find from Herodotus, that Cyrus sent to Amasis, the king of Egypt, for a celebrated oculist. The Greeks and the Romans had their oculists, as is evident, not only from their writings, but from inscriptions on ancient marbles. The antiquaries have shown that Augustus and Tiberius had their oculists; on one stone they found engraved, *P. Attius Atimetus Augusti medicus ab oculis;* and on another, *Tit. Lyrius Tiberii medicus ocularius.* There is no doubt that oculists were at least as numerous in ancient Rome as in any modern city.

The Greeks, the Romans, and the Arabians were ignorant of anatomy, and could not, therefore, be acquainted with the essential nature of diseases, i. e. the altered structure of organs; nor connect with those changes which really constitute disease, their appropriate external signs or symptoms. This disadvantage, however, is not so great in diseases of the eye as in many other affections, because so many of them are externally visible, and obvious enough without anatomical knowledge. Hence the Greeks, who were good observers of nature, had noticed most forms of eye disease, in many instances described them well and distinguished them accurately. The extent of their knowledge is evidenced by the imperishable records of their language, for most of the diseases still bear the names given to them by the Greek writers. Celsus contains a summary of all that was known in his time. Although he was entirely ignorant, even of the seat of cataract, he has described the operation of couching excellently and very concisely, not omitting the important subjects of previous preparation and after treatment, for which his directions are quite judicious.

In the fifteenth, sixteenth, seventeenth, and first half of the eighteenth century, the management of the diseases of the eye was left to quacks, to mountebanks, and itinerant practitioners. There were many of them, both in our own country and on the Continent; and a man called Woolhouse, who was oculist to king James II., signalised himself by opposing the doctrine of the lens being the seat of cataract. A family of the name of Taylor, for many generations, were in great repute. The most celebrated of these, after he cured all the curable in this country, according to his own account, took it into his head to visit the Continent, and there he travelled with a most splendid equipage; his carriage was drawn by four horses, very gaily caparisoned; then he had four out-riders, and as many in the rear of the procession; the pannels of the carriage were painted over with eyes to denote his profession, and he adopted as his motto, "Qui visum dat, vitam dat." (A laugh.) Baron Wenzel, a German, who practised very extensively on the Continent, was also of this class; he was an itinerant operator, and among his peregrinations paid a visit to this country, and he had acquired a considerable dexterity in the performance of certain operations. His success, as an operator, may be supposed to have been very uncertain, when it is considered that he would perform an operation, tie a piece of rag over the eye, give directions that it should be kept on two or three weeks, and start off to some new theatre for the display of his skill. If the patient recovered it was all very well, and a great noise was made of the restoration of the

man's sight; but if, as often happened, the eye was lost from destructive inflammation, nothing more was thought of it.

The anatomy and pathology of the eye, however, were almost wholly unknown by these men, and, as I have before observed, they did nothing to improve the treatment of ophthalmic disease; such might be, indeed, reasonably inferred from their ignorance of the two former subjects. The anatomy of the organ began to be more accurately cultivated by the Germans about the middle of the 18th century. Zinn, Professor of Anatomy at Gottingen, published an excellent anatomical description of the eye, entitled, *Descriptio Oculi Humani Anatomica.*—Afterwards Soemmering published his *Icones Oculi Humani*, a work of unrivalled beauty and accuracy, exhibiting an almost perfect set of engravings.

Among the English authors, I think the best account of the anatomy of the eye is to be found in Dr. Rees's Encyclopædia, under the article *Eye*. It contains the substance of the descriptions of the preceding authors, and was furnished to that work by Mr. Barnes, now residing at Exeter.

The pathology of the organ was not much cultivated until within recent times. Boerhaave made an attempt on the subject, but his work, *De Morbis Oculorum*, is very imperfect; indeed some idea may be formed of the value of his pathological views, from what he has said about mercury dissolving cataracts; he says, "*mercurius sæpe perfectas cataractas solvit.* The Germans have done most towards advancing the knowledge of diseases of the eye; their industry and accurate observations have greatly promoted our insight into this subject. Richter, Professor at Gottingen, and contemporary with Haller, paid great attention to the subject in his lectures, and in his *Bibliotheca Chirurgica.* The best account of ophthalmic diseases, at the time of its publication, is to be found in the third volume of his "Elements of Surgery."

The most important æra in the history of ophthalmic surgery is the foundation of the school at Vienna. Austria has the merit, not only of preceding the rest of Europe by a long period, in the establishment of a school for the cultivation of ophthalmic surgery, but also of establishing it on such liberal principles, and selecting such able men to preside, that it was for a long course of years the general resort of Europe for instruction in this department. Joseph Barth, who was a native of Malta, was the first Professor appointed to this school, (in the year 1773,) and was warmly patronised by the Empress Maria Theresa; he afterwards attended the Emperor Joseph II., to whom he was oculist. He was enthusiastically devoted to anatomy and surgery, and held the professorship of anatomy and physiology in the university of Vienna. When he was getting an old man, he was desired to appoint two persons to be the future Professors of ophthalmic surgery, at the civil and military hospitals; for this purpose he selected two young men of the most distinguished talent and information, and having had them for two years under his particular instruction he resigned.

He fixed upon Schmidt, and another young man, who soon afterwards died; but before they were appointed to the professorships they were publicly examined by a commission of physicians and surgeons, appointed by the government, and operated in their presence.—Perhaps it would be a good thing, and attended with happy results to the public, if a similar mode of procedure were adopted in this country, previously to the election of certain officers to public institutions. (A laugh.) Schmidt succeeded to Barth, and published an admirable essay on *Iritis*, in the year 1800; a work on diseases of the *Lacrymal Organs*; and, in conjunction with Himly, the *Ophthalmologische Bibliothek.* He was followed by Professor Beer, who held the situation a great number of years; his name has become well known throughout Europe, in consequence of his having published several works. He was very zealous in his pursuit of information, and very industrious in collecting facts. Of the various books published by Beer, I shall only mention his last and greatest work, which you see on the table. Although it contains, in two closely-printed and thick volumes, the most comprehensive account which we as yet possess on ophthalmic diseases, he very modestly calls it only "A Guide, or Introduction, to his Lectures." It contains a very accurate description of the diseases of the eye, and of the distinction between the various affections. It is not common, however, for human productions to be perfect, and this of Beer's is not exempt from the common lot. With respect to description and diagnosis, this work is very valuable, but it is defective in pathology and treatment; the latter being too complicated, and by no means sufficiently active.

Weller's *Manual of Ophthalmic Disease* is an abridgement of Beer and other German authors. It has been translated

into English by Dr. Monteith, of Glasgow. It will show you the views entertained by the German practitioners; but you must recollect that Weller has extracted from Beer and others, and this (showing the English book) is translated from Weller, so that it gives you the sentiments of the original writers at third hand.

The use of belladonna and hyoscyamus for artificially dilating the pupil, was introduced by Professor Himly, of Gottingen, as a method by which to examine more correctly the interior of the eye, and, on account of the facility which it affords in assisting our diagnosis of the internal affections of the organ, deserves particular mention. He was the able coadjutor of Schmidt in the *Ophthalmologische Bibliothek*. Langenbeck, the present Professor of Surgery at Gottingen, has turned his attention to the subject, and has published some interesting papers, besides noticing all new works, in his Chirurgische Bibliothek.

At Berlin Graëfe and Rust, and at the University of Bonn, Walther, have published several useful tracts on diseases of the eye.

The attention of the Profession in this country, though late, has at last been directed to ophthalmic diseases, and this Infirmary, which was established in 1804, and which was thrown open to the profession in 1810, gave the first impulse to the study of ophthalmic medicine and surgery in England. Mr. Saunders, who founded it, in conjunction with Dr. Farre, received a regular medical education at the Hospitals in the Borough; he had it for some time under his entire management; he introduced the improvement of operating for cataract on infants; and there is no doubt that he would, had he lived, have done much more for the improvement of the science.

The example set by this Infirmary has been followed by others in London, Exeter, Bath, Bristol, Manchester, Liverpool, Dublin, and other places; also in America, and in each of the Presidencies of the East Indies.

It will be necessary for me to mention to you, in a general way, such books as you should have recourse to, to assist you in studying this department of your profession. Among the English works, I may observe that, those of the late Mr. Ware were considered, for a long time, books of authority, and perhaps, if I were to say nothing respecting them, you might infer that I thought the same; but low as the state of ophthalmic surgery was, in England, at the time of Mr. Ware, I consider that his writings are far below the knowledge even of that time. They had an extensive circulation because there were no others. His descriptions of disease are imperfect, and his pathology and treatment very incorrect. On the important subject of ophthalmic inflammation his notions are confused and incorrect; and he is altogether unsafe as a practical guide. The only value of his writings, at present, arises from their containing some interesting facts, which occurred in a long practice. The posthumous work of Mr. Saunders, edited by his friend and colleague Dr. Farre, is valuable, and well worth your study. Its style is clear and satisfactory, although the subjects of which it treats are few. The valuable observations appended by Dr. Farre lead us to regret that he has not communicated to the public, more largely, the interesting results of his long practice, his close observation, and mature reflection.

Scarpa's work on the diseases of the eye, which has been translated into English by Mr. Briggs, is well worthy of perusal. The articles in the last edition of Mr. Samuel Cooper's Surgical Dictionary are well executed and valuable, as they furnish at one view what would require the examination of many works to find. The translation of Weller by Dr. Monteith you will also find useful. Among living authors who have written on the diseases of the eye, I may mention to you Messrs. Wardrop, Vetch, Travers, Guthrie and Mackenzie,* names so respected, that it is not necessary for me to say any thing more of their productions. The writings of the French oculists Maitre-Jean, Janin and St. Yves, although now antiquated, were much better than those of their English brethren. The pompous work of Demours is long-winded and worthless. The Germans certainly have the superiority; their works are the most valuable on this subject. Richter's volume of the Elements of Surgery, and the work of Beer, before mentioned, are the two most generally known. Those of Schmidt, Langenbeck, Himly, Graefe, Walther, and others, must be studied by those who wish to understand the subject thoroughly.

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* Introductory Lecture to a course on Diseases of the Eye; and Essay on the Diseases of the Lachrymal Organs.

LECTURES

ON THE

THEORY AND PRACTICE OF PHYSIC,

By DR. CLUTTERBUCK.

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LECTURE I.

Gentlemen,

It is customary to introduce a Course of Lectures on the Practice of Physic, and, indeed, on any of its branches, by a history of the subject, and an inquiry into its source and origin.

On the present occasion, however, I shall take the liberty of deviating from the established practice; first, because the variety and extent of the subjects which are to be discussed, will fully occupy the time we have to bestow upon them, and, in the next place, because such an inquiry would be attended with doubt and uncertainty, while it could lead to nothing practically useful.

The origin of medicine is buried in impenetrable obscurity. It must have existed long before there were any means of recording it. Some good Christians, indeed, have ascribed the origin of medicine to revelation; but certainly there is nothing in the present state of our art that gives any particular indication of a divine original. The Greeks, with just as much reason, referred the discovery to Æsculapius, whom they deified as the supposed inventor. A more natural and obvious source than either of these, may easily be pointed out.

Like every art necessary to life, or which is indispensable to human comfort, that of medicine must have arisen from simple and imperceptible beginnings.—Pain and sickness naturally urge mankind to seek relief. Instinct, or natural feeling, would direct them to the use of many remedies, such as cold to allay the heat of fever, and acids to quench thirst; the random trials which the impatience of suffering naturally suggests, must have discovered others; while the spontaneous cessation of many disorders, by the natural evacuations of sweating, or purging, and sometimes by hæmorrhage, would lead to an imitation of these evacuations by art, in other similar cases.

Thus would be gradually established a rude and artless state of physic, founded on observation alone, or on very simple experiments. The knowledge thus obtained, would necessarily be scattered in many hands; and in order to derive the benefit of it, it was customary to expose the sick on the highways, that passers by might communicate the result of their experience in cases of a similar kind. Some vestiges of this state of things may yet be observed among us; for people still consult, about their diseases, every gossip that comes in their way, as if no such art as that of medicine existed, or was separately practised.

Such, we may conjecture, was the state of medicine at first, in all countries. For the reasons given above, I shall not here attempt to trace its progress from rudeness, to its present comparatively advanced state; such an inquiry could tend to no practical use, but would occupy time that may be better employed.

I shall proceed at once, therefore, to the immediate business that is to engage our attention. The purpose of our meeting is to acquire a knowledge of the principles of medicine, and it will be my duty to point out to you the path you are to pursue, and to assist you, as far as is in my power, in the acquisition of this knowledge. The subject is of great extent and variety, so as to require that it should be divided for the convenience of study. What we undertake to teach here, is that part of the science which falls within the physician's province, and which we divide into two general heads; the one entitled the theory and practice of medicine, the other the materia medica. These are sufficiently distinct in their nature, and of sufficient extent to constitute different branches of study; and they will accordingly make the subject of two distinct courses of Lectures, which will be delivered alternately daily, at the same hour.

Medicine may be defined "the art of *treating*, not *curing* diseases." A wide distinction exists between the treatment and the cure, if by the latter term we are to understand the removal of the disease; for there are many diseases that are absolutely incurable, yet are proper subjects of medical treatment. There are others that are best left to themselves, to go through their course without interruption. And there are likewise some that it is best to encourage, or even aggravate. Of all these, instances will appear as we proceed. The proper definition of medicine therefore is, "the art of treating diseases in the manner the most conducive to the benefit of the patient;" and it may consist either in at once endeavouring to suppress them, or in allowing them to run through their

course, contenting ourselves with palliating merely what we do not or cannot cure.

I have already mentioned the division of medicine into *two branches*, each of which will make the subject of a *distinct course* of Lectures. The first of these comprises what is called the "Theory and practice of physic," the other the "Materia Medica," including "Chemistry," which is chiefly of importance in relation to this. I shall now proceed to point out briefly the manner in which each of these will be handled. Under the head, THEORY AND PRACTICE OF PHYSIC, will be given,

1st. A minute and particular description of the various disordered states to which the human body is liable, that we may recognize them when we meet with them in practice, and be able to distinguish them, so as not to confound one with another. This is what is technically called the *diagnosis*, or diagnostic branch of the art, and is of great practical importance; for if we mistake the object before us, it is not likely we should treat it with propriety or with success. You must all have heard the vulgar adage, that "a disease once known is half cured."

2dly, The next point is, to assign the *causes* which bring them on, as far, at least, as we can ascertain them. This also is of much importance; for in many cases it is sufficient to remove the cause, and the disease will subside of itself. Diseases may be prevented, likewise, by our knowing and avoiding the causes which induce them. Some diseases, indeed, take place without any *apparent* cause, and such have been said to arise *spontaneously*. This, however, cannot be strictly true, because every effect must have a cause. The existence of the disease is itself a proof of the existence of a cause, though we may not at all times be able to detect it. All that is properly to be understood by the term "Spontaneous diseases," is that they arise without any *obvious* cause.

3dly. After having described diseases, and pointed out their causes, it will be useful to notice the signs by which the *event* may be judged of, or what is termed the *prognosis*, a subject in which the reputation of the practitioner is greatly involved. We seldom, however, know enough of the intimate nature of disease, to enable us to prognosticate with absolute certainty. Our answers, therefore, to the inquiries of the patient's friends, should always be guarded, and the event spoken of as a matter of probability only.

4thly. The next object will be, the inquiry into what is called the *proximate cause*; by which I mean the investigation of the *seat* and *nature* of the disease, the discovery of which is always of great importance, and contributes much to the rational and successful treatment of it. This is what is properly called the "Theory of medicine," which endeavours to explain the production of the various symptoms, to point out their connexion and dependance on one another, and the relation they respectively bear to the cause of the disease.

This branch of the science is, however, of all the most imperfect. There are many diseases, the nature of which is very imperfectly, or not at all, understood; and some which we cannot, at all times, even with the aid of dissection, refer to any particular seat in the body.

5thly. It is useful to know the *alterations* which diseases induce on the organs which they affect, as discoverable by dissection after death, or what is termed "Morbid anatomy," for by this the *seats* of diseases are often discovered, and sometimes their *nature* also. It serves, moreover, to confirm, or to disprove, the opinions we may have formed upon these points during life, and thus corrects our judgment for the future. To prosecute this branch of study, namely, morbid anatomy, with advantage, we see of what importance anatomical knowledge is. We can only detect diseased appearances, by comparing them with the healthy, which, therefore, must first be familiar to us. For the want of this preparatory knowledge, nine-tenths of the dissections that we find related in books, are not to be relied upon.

6thly. The last subject of inquiry, and to which all the others tend, is the "Treatment of Diseases;" the *principles* upon which the *cure* is to be attempted (called technically the *indications of cure*,) and the means of effecting it, will be pointed out, as deducible from the nature of the disease, before explained, and as confirmed by previous *experience*.

Many practitioners place all their confidence in experience alone, and ridicule theory, because, as they say, the latter is vague and uncertain. Such an opinion is, however, far from being justly founded, and is, in general, only a cloak for ignorance. We do not disclaim experience as a guide, but we do not rely upon it principally, because it is an insufficient one. If diseases that are called by the same name, were alike in all their circumstances, so as to admit of the same kind of treatment, experience then would be fully adequate to our purpose; but it is far otherwise. There are hardly any

two cases of the same disease, that admit of precisely the same mode of treatment. There are, in fact, many grounds of difference, such as age, sex, individual constitution, climate, and many others, which alter the character of diseases, and influence, more or less, the mode of treatment. Even the *stage* of the disease is a thing of no small importance in regard to the cure. All these require to be studied, in order to successful practice. The consideration of them, and the inferences to be drawn from them, constitute *rational medicine*, (in contra-distinction to *empiricism*, or mere experience,) and is what alone entitles medicine to be called a science. It is from considerations of this kind that the *general principles* of the science are drawn. These general principles constitute what is termed *theory*. It is, undoubtedly, possible to practise medicine to a considerable extent, *without* this species of knowledge. And we may without it often succeed in curing diseases, as empirics do, and as must have been the case in all rude ages; for science must have been posterior to art, and theory to practice. There is a great deal of this *practical* knowledge of physic always afloat among the public, who are in the same situation, in this respect, with the practitioners in the early ages of science.

I might illustrate this by reference to Peruvian bark, which, in a general way, may be said to cure agues. But then there are many cases of agues which the bark will not cure, unless attention be paid to other circumstances—in which, even, instead of curing, it will do harm. I might also refer to the use of mercury in syphilis, and of bloodletting as a remedy for fever and inflammation. These different remedies, though generally successful, are not invariably so, owing to a variety of opposing circumstances, which require to be studied in order to obviate them.

Now the being able to discriminate between these different cases, and the knowing in what particular circumstances a remedy is proper or otherwise, distinguishes the *scientific* practitioner from the mere *empiric*, who administers his remedies without discrimination. This knowledge is only to be attained by an extensive acquaintance with the science of medicine in all its branches.

The second branch of medicine, which will form the subject of a distinct course of Lectures, is that called the MATERIA MEDICA. In our attempts to cure disease, we often employ certain substances, which we apply to the body under the name of "drugs," "medicines," or "medicaments," and which are very numerous, and of various origin; and we call the study of them altogether the materia medica. The natural history of these; the manner of preparing them for use; the quantity or dose in which they are to be administered; their general effects on the body; and their mode of acting in the cure of diseases, as far as this is understood; the particular circumstances in which they are indicated, or the contrary, and the cautions necessary to be attended to; these together form an extensive field for inquiry. Medicinal substances, as presented to us by nature, are seldom found fit for immediate employment, and much art is often required in the procuring and preparing them for use. We have frequently to separate the inactive from the more active part. This also forms a branch of medical study, under the name of PHARMACY. The *quantity* to be administered, or, in other words, the *dose* of these substances, forms a most important part of our inquiry into the materia medica. The effect of a remedy depends, in a great measure, upon the dose; for in many cases, in proportion as the dose is varied, so is the effect that follows. I might illustrate this by reference to antimony, which, in one dose, is emetic, in another, purgative, and in a third, diaphoretic. So also bark and alum, in certain doses, are astringent, while in larger ones they readily prove cathartic. The operation of medicines, or the changes induced by them on the body in health, and independent of disease, is an inquiry of great importance. The effects of medicines in the cure of disease, are in general to be deduced from their effects in health, so that those medicines which produce no effect in the healthy state, are in general useless in disease. As far as we can judge, medicines operate principally by making a powerful impression on the system; they establish a new mode of action; this, in many cases, proves to be incompatible with the diseased action, which consequently declines. Some medicines, however, on which great reliance is placed by some practitioners, do not appear to have any effect in altering the healthy state of the body, and it is difficult to conceive, upon the principle above laid down, how they should be able to accomplish the removal of disease. I might mention as an example the *sarsaparilla*, the virtues of which appear to me to be more than questionable. The appeal to experience in its favour, is far from satisfactory. This one example is sufficient to show us the necessity of paying attention to this part of our subject. We

should not rest satisfied with being told that one remedy is good in one disease, and another remedy in another disease, but should always inquire into its mode of acting, and its general effects on the system. I might here instance mercury, which, in a general way, may be said to cure syphilis. But if we administered it in every case of this disease, without reference either to its mode of acting, or to the state of the constitution, the remedy would often do the patient more harm than the disease.

I have said, that medicine is the "art of treating diseases," but it does not follow that it consists in the exhibition of drugs, though too many practise physic as if it had no other object; but there are a great number of occasions where it is more for the patient's benefit that no drug should be administered, and that the disease should be left to itself—where the interference of art would rather obstruct than facilitate his recovery.

To know when this is the case requires a perfect acquaintance with the history of diseases, their progress and tendency, when undisturbed. This species of knowledge is of very difficult attainment, and there is nothing in which young practitioners so frequently err, as in the unnecessary use of powerful and active remedies in cases that are going on favourably to a natural termination, and which are often rendered irregular, and of more difficult cure, by hasty and injudicious attempts to suppress them.

Chemistry will make a part of this Course, (the materia medica,) because it is chiefly of importance in its relation to pharmacy. Chemistry, notwithstanding the vast advances it has made of late years, and the important applications that have been made of it in other arts, has still but a remote relation to medical science. It is of no service to us in regard to physiology; it does not offer an explanation, that is altogether satisfactory, of any one of the functions of the animal œconomy. Decompositions and new combinations are, no doubt, continually going forward in the living body, but they have little or no analogy, that we can trace, with the ordinary processes of chemistry. We cannot form, artificially, the simplest of the animal fluids; nor can we account, in the least, for those wonderful changes which the fluids undergo, by being subjected to the action of the secretory organs. We see the same blood carried to the liver and to the kidneys, and we find separated from it, by the action of these organs, in the one case bile, in the other urine; but neither bile nor urine are to be found in the common mass of blood, nor can we extract them from it by any art of chemistry.

Nor is chemistry of more avail in explaining the changes that take place in the body in disease. We find the condition of the fluids subject to considerable alterations under disease, but the way in which these alterations are brought about we are totally ignorant of, and equally so of the direct means of remedying them. It will enable us to destroy a prevailing acidity of the primæ viæ, and to account, indeed, for its production upon the common principles of fermentation, but it has nothing to do with that derangement of action in the organs which allows the fermentation to go on, and upon which the continuance of the disease depends. Even in calculous disorders, as the stone in the bladder, where chemistry seems to promise so much, it has, in a great measure, failed us, and we are still frequently under the necessity of resorting to a dangerous and painful operation for relief. We have, indeed, solvents which readily act upon the stone out of the body so as to dissolve it, but they are capable, at the same time, of destroying the texture of the body itself, which, in a great measure, precludes their employment.

For a long time diseases were looked upon in no other light than as chemical phenomena, and the cure of them undertaken upon corresponding principles; but the fallacy of this we are now well aware of; chemistry does not adequately explain the production of the simplest of our diseases, and consequently does not suggest any certain means of relief.

The chief benefits which chemistry has conferred upon physic are, its having furnished us with several new and powerful remedies; its enabling us to extract the most active parts of many drugs, so as to concentrate their powers and enhance their efficacy; it also enables us to distinguish one medicine from another, and thus to guard against adulterations; so that chemistry is more allied to pharmacy, or the preparation of medicines, than to either the science or practice of physic, properly so called. One important advantage, however, derived from chemistry must not be overlooked, namely, its enabling us to detect poisons, at least those of a mineral nature, and, in some degree, to counteract them.

Botany, as well as chemistry, is a science in some degree allied to medicine, and must not be wholly overlooked. The general use of chemical remedies in mo-

dern practice, and the introduction of those of a vegetable nature from abroad in a dried, or otherwise prepared state, have very much diminished the importance of botany, as a part of medical study. It is still, however, necessary, so far, at least, as to enable us to distinguish the indigenous plants in use, especially those of the narcotic tribe. Opportunities will be afforded here for the acquirement of this degree of botanical knowledge, and specimens shown, as well as of the materia medica in general.

I must not conclude without remarking to you, that general lectures on medicine, however minute and accurate they may be, are still inadequate to the purposes of actual practice. Diseases must be seen, as well as studied in books, or as described in lectures, and therefore the Court of Examiners, at Apothecaries' Hall, have wisely required a certificate of attendance on the medical practice of some hospital or dispensary.* There is much to be discovered by observation and inspection of diseases, of which words will not convey a sufficient idea to the mind; such, for example, is *expression of countenance*, which, in many cases, tells us in an instant the nature of the case before us; as in *brain affections* more particularly. It is not difficult to one accustomed to observe diseases attentively, to detect a fever by the expression of the features alone; and so in regard to the *pulse;* there are qualities of pulse, such as *fulness* and strength, as well as others, which are very easily perceived, but an accurate notion of which it is very difficult to convey by language to others, because, in reality, these qualities have no standard by which they can be measured. In general lectures, we are obliged to give a complete history of all the symptoms belonging to the disease, even such as are of occasional occurrence only, as if they were present at one and the same time; but this is never the case. If we expect to find diseases exactly as they are represented in general lectures, we shall be disappointed. The elements indeed are there, but not the precise combination of them that occurs in real life. We look at the Apollo and the Venus de Medicis, and observe models of perfection, not actual representations of the human figure, as it ever really existed. Every feature and limb, individually taken, is indeed perfect, and we may find the counterpart in nature, but it is in different individuals. These models excite only general ideas of beauty in the human figure, but they have no actual prototype in nature, the productions of which are always of a mixed and imperfect kind. So it is with diseases; in order to obtain a practical knowledge of them, we must not only make ourselves acquainted with their general history, but must study them individually also, as they occur in actual practice.

It will be proper for me now to say a word or two upon the *authors* it may be useful for you to consult, during your attendance on a course of lectures. They ought to be very few. The arrangement and expansion of your notes will leave but little time for the perusal of books, while much, and various reading, will serve but to confuse your ideas. The authors you consult at this time should be original ones, and such as teach the general principles of the science, particularly *physiology;* and I know not what better sources to refer you to than to the different writings of Haller and Blumenbach, the Monros and Hunters, for physiology; and those of Dr. Cullen for practical medicine and the materia medica. These are some of the great authorities to which you may safely appeal, and who will not mislead you. At the termination of the Course I shall enter somewhat more largely into the literature of the science.

From what has been now said, you will be convinced that much time and labour will be required for the acquisition of such a variety of knowledge, and after all it can be but imperfectly attained. I say this after more than thirty years' acquaintance with the subject; every day serves more and more to convince me of the imperfection of our art. There are a great number of diseases that we do not understand sufficiently, and many more that we cannot cure. This ought not, however, to discourage us; it ought rather to incite us to greater exertion, which will not go unrewarded, for the science of medicine is progressive, and is making daily strides towards perfection. When it shall have abandoned mystery and mercenary views, (the only object with which it appears at present

* The necessity of studying diseases, individually and by actual inspection, is very obvious. We more readily remember what we see than what we hear, or read of. The experiment has been often made of placing a student, thoroughly conversant with diseases as described in books and lectures, but who had seen little of them in actual practice, in the midst of a large hospital, and he could scarcely name one of the diseases around him.

to be pursued,) it may be expected to keep pace with other sciences, and become as liberal, as it is unquestionably useful to mankind. In the mean time it is not to be doubted, that the insufficiency of the medical art is the great support of quackery at present. The sick do not easily abandon hope, but readily give credit to promises of cure; and where art and science avail nothing, it is little to be wondered at that patients fly to empirical pretenders, as drowning men catch at straws.

LECTURES

ON SOME

PRACTICAL POINTS OF SURGERY,

DELIVERED TO THE

Students of the late Borough Dispensary,

By MR. ALCOCK.

Lecture I.

Gentlemen,

I shall not detain you, by attempting to trace the history of medicine, of which surgery forms no unimportant part; but shall proceed briefly to the consideration of the present system of medical and surgical education.

You are aware, gentlemen, that few subjects are of deeper interest to the community than the healing art; whilst its intricacy is so great, that the successive ages which have elapsed since its origin have been far from effecting a degree of perfection which should render improvement unattainable.

Much, however, has been done to place the art of medicine on the basis of a science, but until perfection shall be attained, every attempt to extend the limits of our knowledge, or to give increased precision to that already attained, may claim the meed of good intention, since the object is to diminish the sum of human suffering.

The existing division and sub-division of the medical profession is of modern date; for originally all that appertained to the treatment of disease was practised by the same individual; and the division took place not as an arrangement necessary for the public good, but because the monks, who acted as the physicians, were not permitted to practise surgery. In this metropolis the sub-divisions have been carried to a ludicrous extent; we have physicians, surgeons, apothecaries, druggists, men-midwives, oculists, aurists, dentists, cuppers, and various others, down to the mere cutter of corns, pompously termed chiropodist.

The general practitioner unites the offices of the physician, the surgeon, and the apothecary, and to this class is the health of the community for the most part intrusted.

An author who has shown deep knowledge of his subject has observed:

"The wants of society require a competent supply of general practitioners. The interests of the science, and the accommodation of the higher ranks of society, require that there should be also a suitable supply of practitioners in the separate departments of physic and surgery. In each instance the supply will, with considerable certainty, accommodate itself to the demand, if not prevented by injudicious influences and restrictions. The wants of society require physicians, surgeons, and general practitioners; the first practising physic exclusively, or physic and midwifery conjoined; the second, surgery and physic, and sometimes midwifery; the third, superadding pharmacy to the several other departments. In this view the profession presents us with a series, in which each department is seen embracing a wider field of practice than the one immediately above it. It may be typified by a cone, of which the department of physic is the apex, that of general practice the base.

These several practitioners may be regarded as in some measure forming the gradations of rank in the profession, by which it accommodates itself to the corresponding gradations in general society; the physicians being suited more particularly to the higher orders; the surgeons holding an intermediate rank between the physicians and general practitioners; and these latter embracing the whole community, from its highest to its lowest degree, their utility rendering them necessary to the former, while their humility and habits of active industry fit them for extending their services to the lowest extreme."

Of the education of the physician I shall touch but lightly; for as the object of the series of lectures to which these remarks are introductory is to illustrate surgical practice, it is not my intention to discuss the separate department of medicine further than may appear requisite to elucidate its connexion with surgery.

The routine of the education of the physician, if at either of our English Universities, is to keep a certain number of *terms;* to pursue the course of study required by the rules of the University;

and to undergo an examination in the Latin language as to his knowledge of medicine.

Now in this course of study their appears but one incongruity, that at these universities there are no efficient schools of anatomy; no clinical hospitals for the instruction of the medical graduate: consequently his knowledge, if furnished at the university, can only be derived from lectures and from books; so that however great his attainments may be as an elegant and accomplished scholar, the actual and solid foundation of medical knowledge, namely practical anatomy and the observation of disease, is wanting; unless obtained from other sources than the university.

In the northern universities of Edinburgh and Glasgow, the course of study assimilates to that pursued by students in London, whose object is to qualify themselves for general practice.

In those universities, which furnish the greatest number of medical graduates, the period deemed necessary for the education of the physician is three years; or rather three seasons, as two of the summers of these three years may be spent elsewhere.*

The schools of instruction are generally well arranged, and some of them most ably conducted; but owing to the prejudices of our northern neighbours, anatomical investigations are but scantily pursued beyond the demonstrations of the lecturer; and few of those proposing to follow the separate department of medicine practise dissection to any considerable extent. Hence the ground-work of medical knowledge, a thorough acquaintance with the structure of the human body, frequently remains defective.

The number and variety of the courses to be attended are so great, that the time is insufficient to make the attainments solid, and it not unfrequently happens that the young physician takes his diploma with high honour, but without much tact in the actual knowledge of disease, which is usually observed under complications that do not square with any of the nosological systems, although he may be perfectly able to repeat these systems from beginning to end.

Hence, therefore, if the physician is to become a really efficient practitioner, he must begin where the generality leave off, and commence educating himself after his studies at College have terminated.

Of the surgeon only, termed in London, par excellence, "the pure surgeon," as if purity consisted in the limitation of acquirements, much need not be said; for to whatever department of the healing art an individual may choose to confine his practice, he cannot be efficiently educated without a comprehensive knowledge of medical science, and a tolerable acquaintance with the accessory sciences.

The *pure* surgeon is scarcely to be found, except in large cities, and his usefulness is so limited, compared with that of the efficient general practitioner in medicine and surgery, that in thinly-peopled districts he would be apt to starve upon his notions of exalted rank, whilst the more extended usefulness of the general practitioner would secure to him employment and its reward.

The routine of professional education of the mere surgeon is usually attended with some favourable and many unfavourable circumstances. Some extent of private fortune, or of assistance from friends, is indispensable, not only during education, but during the period of expectation, before a practice can be formed sufficient to meet the wants of the individual. This dependence upon extraneous assistance not unfrequently paralyses the exertions of the student; amply supplied with money, the temptations of gaiety and dissipation, in a place like London, are often too powerful to be resisted, and I need not tell you that dissipation and science seldom go hand in hand.

The more humble student has the strong stimulus to exertion of knowing that all must depend upon himself, and upon his fitness to fulfil the duties of his profession, and that by his merit he may rise to fortune and esteem, or by the want of it he must sink into neglect and ruin.

It is true the ample means of the opulent student can give him access to any or all the sources of professional knowledge which this great metropolis affords, and they are many and valuable; but owing to the circumstances before alluded to, his opportunities too frequently produce a less ample store of useful knowledge than the scanty means and persevering exertion of the more humble student enable him to attain.

The candidate for *pure* surgical fame commences by being *articled* to some gentleman of high repute, perhaps an hospital surgeon, whose time may be so much engaged in practice, that the instruction

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* Since these lectures were delivered, the University of Edinburgh has passed new regulations extending the period of study.

of the person so articled is the least thought of. He begins by attending lectures, walks the wards of the Hospital, dissects, probably becomes a tolerable anatomist, and aims at being a great operator, and perhaps finishes by paying for and holding the situation of house-surgeon to an hospital, where no doubt much *must* be seen and *may* be learnt; but seeing and observation are not the same; neither does that practice, to which the patients of an hospital have no other choice than to submit or to go out, imply that steady, nay, anxious reflection, on the cases observed, which is essential to the performance of surgical duties.

If, thus qualified, he aspire to become a great operator, he perhaps forgets the most obvious and necessary of all distinctions, namely, the difference between the dead subject and the living body, and that many errors may be committed with impunity on the former, which on the latter endanger the life or destroy the comfort of the individual during the remainder of his existence. I have on this subject many painful recollections, and somewhere lives have been thus sacrificed, but I forbear entering into particulars: it will suffice here to guard you against the indulgence of so dangerous a propensity.

The pure surgeon too frequently despises the knowledge of medicine, without which a surgeon cannot be safely trusted, and many are the unfortunate instances in which the mere performance of a dangerous operation has been skilfully effected, whilst the patient has died in consequence of the want of medical skill in the after-treatment.

Passing from the *pure* surgeon to the *mere* apothecary, the similarity of limited usefulness, both being the offspring of large cities, must immediately be apparent. The advantages arising from a more extended professional education have become so obvious, that the race, I believe, is nearly extinct.

The routine of education of the general practitioner is often as defective as any of the preceding. An apprenticeship too frequently idly spent, or in manipulations not much connected with mental improvement, fills up some of the best years of existence, when the ardour of youth, if properly directed, might secure to the professional student a rich harvest of useful and valuable knowledge. After apprenticeship, the attendance on lectures, the performance of dissections, and the observation of hospital practice follow; but, unfortunately, the time is generally too limited, and the student left without a guide to conduct him in the best path to useful attainment. The time that should be given up to arduous study, is too often squandered in preparing for examinations so nearly resembling farces, that the passing of them reflects no honour.

These slight sketches represent the general routine of professional education, which every one who has examined for himself, must be aware is extremely defective. That there are honourable exceptions, and that individuals have risen to eminence in each department, is also well known, but the proportion of those entering upon practice, who are faithfully qualified for the arduous duties of the profession, is, I fear, but a small part of the whole.

The influence of colleges, and corporate bodies connected with the profession, is considerable; and, as in other institutions, will be found beneficial, if the views of those who have the management be founded in liberality and justice; whilst, should the contrary be unfortunately the case, the influence, as far as it extends, can only be deleterious. But as many of those present have been educated in general practice, and are likely to follow that department, a few words may be allowed to the consideration of circumstances, not wholly surgical, relating to the general practitioner.

By an Act of Parliament obtained by the Apothecaries' Company in the year 1815, no person not actually practising as an apothecary at or before that time, can legally commence practice as such, unless he shall have served an apprenticeship of five years to an apothecary, and have been examined by the Court of Examiners of that Company. Whether an apprenticeship of five years be necessary to acquire a knowledge of the practice of pharmacy only, I must leave others to determine. If the master be a mere apothecary, the sphere of the apprentice's attainment will most likely be very limited, and even in general practice, as the greater part of apprenticeships are conducted, the pledge of the master faithfully to instruct the apprentice, too frequently remains a dead letter, and the compact appears little better than a slavery for a term of years for the sole benefit of the master, the apprentice performing the work of an automaton, or of a machine.

I am far from being of opinion that the period of apprenticeship is unprofitable to the pupil, provided he have the opportunity of witnessing disease and its treatment, and that his studies be properly directed and superintended; and some there are who make it a conscientious duty thus to fulfil their compact

with their apprentices. A pupil thus initiated possesses a decided advantage in the use of his hands, and in that higher attainment, quickness of discernment, so essential to the investigation and treatment of disease. The student, on the contrary, who has thought it sufficient to attend lectures and walk an hospital, may shine in hypothetical discussion, but will rarely posesss that tact in the treatment of disease which is readily discovered by the patient and his friends, and which is necessary to deserve and obtain their confidence.

The Act before alluded to, generally called "the Apothecaries' Act," contains several clauses so derogatory to the profession, that it is surprising the members of it could have suffered the bill to pass the legislature without remonstrance, and pointing out its incongruity and its tendency to injustice.

Could it be believed that the refusal to make or *give* medicine ordered by a physician's prescription should be visited by the same penalties as the undertaking to compound, and wilfully and fraudulently sophisticating? and that a mere accidental mistake, of no practical importance, should be a crime of the same deep dye? and that the penalty for each, if incurred a third time, is no less than that of being rendered incapable of practising his profession in future!

Gentlemen who practise as apothecaries should carefully peruse and be aware of the provisions contained in this Act of Parliament, which is a private one, obtained by the Apothecaries' Company, and not, as Earl Stanhope stated in the House of Lords what it ought to have been, a public act for the protection of the public.—After eight years, its imperfections have become so glaring, that if an apothecary at the Land's End in Cornwall, or at the northern extremity of Northumberland, should sue a patient for a debt incurred for medicines, he must not only prove the hand-writing of the Examiners who signed his certificate or license, but must also prove that the same gentlemen did, at the time of signing such certificate, constitute a majority of the Court of Examiners. The attesting signature of the secretary goes for nothing, there being no mention made of any such personage throughout the Act.*

The regulations of the College of Surgeons have of late excited much attention. You are, I doubt not, aware of the import of these edicts, as they are conspicuously displayed in the various Hospitals of the metropolis, and have been republished in a periodical publication which is widely circulated among the profession.

I need not tell you that some time ago the Court of Examiners, not content with their former restrictions, which set at nought any acquirement of surgical knowledge obtained by attending provincial Hospitals, further determined to exclude certificates of attendance on lectures on anatomy and the performance of dissections, unless in the winter season.

Now when it is considered that part of the Examiners, extensively employed in private practice as surgeons, are actually engaged in the delivery of lectures on anatomy, and that their courses are continued only during what they are pleased to term the winter season, whilst there are other lecturers, who devote themselves almost exclusively to the instruction of students in anatomy, and who deliver lectures during the summer season: this regulation, to say the least, comes with a bad grace from those whom it would be difficult to prove disinterested, since it is well known that by antiseptic processes subjects can be preserved during the summer, so as to admit of dissection, as well as in the winter. It would be a waste of time to trace the hardship to the student imposed by the arbitrary regulations of the College. Suppose a student anxious to qualify himself for the duties of his profession, but whose limited means did not enable him to pay ten guineas for each subject he should dissect, nor thirty more for the privilege of walking a London Hospital, should spend a year in France in diligent study, where subjects can be obtained for the trifling amount of a few shillings, and where the Hospital practice can be observed without expense to the student,—however qualified he might be in the knowledge of his profession, this *liberal* College would not condescend even to *examine* him, unless his fees should have flowed into the few favoured channels pointed out by the Examiners; and as there are Examiners who are Hospital surgeons and teachers in anatomy, thus deriving large emoluments from the fees paid by students, and whose influence may have placed their relations in similar situations, you may draw your own inference of the disinterestedness of such regulations; but this is only one instance out of many that might be adduced, were it worth the while.

* Since that period an amended Act has passed the Legislature, which qualifies and improves some of the minor provisions of the former, but the leading principles remain unaltered.

Hence it may be inferred that the student must expect no assistance, but on the contrary obstacles to his improvement, from Colleges and Corporate bodies; he must trust to his own exertions, and if these be persevering and well directed, he may attain eminence in his profession, notwithstanding all the impediments which may be thrown in the way of his advancement.

Passing from subjects that cannot be mentioned with approbation, I shall proceed to offer some suggestions towards the direction of your studies which I trust may contribute to your welfare and success.

I have before alluded to the necessary connexion of surgery with medicine and the accessory sciences, and also to the requisite foundation in anatomical knowledge, without which surgery is dangerous and destructive rather than beneficial.

One of the most frequent errors which I have witnessed, is that of neglecting what are termed common cases, or those of frequent occurrence; whilst others, little likely to fall to the lot of the young practitioner, are sought after with avidity. I am fully convinced that the welfare of the patient and the reputation of the surgeon, more frequently depend on the manner in which the ordinary duties of the surgeon are fulfilled than upon extraordinary operations. I should therefore strongly advise, that the observation of the student be directed to the common accidents and diseases which fall to the lot of surgery; that the manipulations required in the dressing of wounds and ulcers, be studied and practised until accuracy, dispatch, and precision be attained; that the minor operations be similarly studied, and, subsequently, the manner of adjusting fractures, &c.; in short, that all the mechanical adaptations should be so ready, that no awkwardness should appear, nor difficulty be experienced. The various operations of more rare occurrence may be successively studied and practised upon the dead subject, until all the steps of each operation can be perfectly performed.

Necessary, however, as the neat and ready performance of the manipulations of surgery may be, the judgment required to determine when they are called for, is of higher value and more difficult attainment. Medical surgery is unfortunately too little cultivated, and less valued than its importance demands. The surgeon who does not understand the constitutional treatment of diseases, must be often humiliated by failure. Many a limb has been amputated, which, by the aid of judicious constitutional treatment, combined with local remedies, might have been saved.

The surgeon requires, and should attain all the medical knowledge proper for the physician, and a much more accurate knowledge of the structure of the body, as well as mechanical dexterity in the performance of surgical operations.

The conduct of the surgeon should be characterised by habits of accurate and patient attention, of persevering exertion, and of active beneficence. The mean jealousies of professional rivalship, and the mercenary arts of a gainful trade, are unworthy of the medical character; the real dignity of which consists, not in empty titles and distinctions, but in soothing the distresses and alleviating the sufferings of mankind.

In the subsequent Lectures, I shall endeavour to illustrate some of the unostentatious every-day duties of the surgeon; and from the diligence and zeal I have observed in the students attending the practice of this institution, for whose use the Lectures are designed, I entertain the pleasing anticipation that their progress in improvement will keep pace with my good wishes for their welfare.

ON THE

Treatment of simple and contaminated

PUNCTURE,

By J. SHERWEN, M.D.

"Cases of inflammation of the cellular substance, caused by the absorption of morbid matter, and extending along the arm to the muscles of the trunk, have of late become so common, that they must cease to be interesting, until some new plan of treatment, more successful, shall be discovered than that with which we are already acquainted."—LANCET, Vol. viii. p. 299.

To the Editor of THE LANCET.

SIR,—I am not absolutely certain that the plan which I am about to propose will, in every instance, supply the above desideratum, which I have taken as a motto for this paper from the popular and instructive pages of THE LANCET, but I am very much inclined to believe, that the practice which I have adopted, and uniformly inculcated * during the last half century, will rarely fail to afford satisfaction and comfort both to the surgeon and his patient.

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* See the Medical Spectator.

In the year 1776, I published (in Dr Duncan's Edinburgh Medical Commentaries, vol. 4, p. 1) a case of what I then considered to be the *puncture of a nerve* in phlebotomy, and which, from the sudden cessation of every untoward symptom on the transverse section of the integuments above the original wound, I still consider in the same light. In that paper I noticed the insignificance, if not actual mischief, consequent upon the too free use of warm poultices and fomentations. From that time I have been regularly in the habit of applying, to every simple puncture, a pledget of lint wet with the spirit of turpentine, covering the part with the cold saturnine lotion.

The advantage of this practice will best appear in a short detail of the two following cases:—

A stout healthy blacksmith mounting a horse, to the pummel of whose saddle he had injudiciously suspended a large bunch of iron skewers, from some unlucky motion of the horse, had the misfortune to throw his right leg upon the point of one of the skewers, which penetrated through the middle of a thick fleshy calf, so that the point was felt pressing against the opposite side.

Haydon, an old soldier, who had fought at the celebrated siege of Minorca under Blakeney, and who was working at the time this note was written (viz. A.D. 1786) as a bricklayer's labourer at Enfield, treading with the whole weight of his body on a large rusty nail, forced it through the sole of his foot, the point projecting one inch or more betwixt the bones on the opposite side.

By the above treatment both of these formidable punctures healed *cito tuto, et jucunde*.

To these cases of *simple puncture* permit me to add one or two of slight contusion, laceration, and excoriation:—

A reverend gentleman, in the 53d year of his age, of full habit, high health, and accustomed to a generous mode of living, had the misfortune to strike his shin against the stump of a tree. A provincial surgeon (long since dead) who had, by some successful manual operations, established considerable reputation as a *scientific* surgeon, was immediately called in. The wound was dressed with all the parade of art. From a gallon bottle of fomentation, cataplasms, &c. being sent, there can be no doubt that much diligence was used in their application. The patient was told that the violence of the blow had killed the part, which must necessarily slough off, and he was directed to take bark and port wine freely. Being a gentleman much beloved, every friend and neighbour who thought himself in possession of better wine than ordinary poured it in upon him, and his amiable family thought it necessary to call some of them in every day to induce him to take more wine than he would have done alone. At the end of two months, the wound, after much inflammation, was healed; and you, Mr. Editor, will not be surprised when I add, that on the day the patient had appointed to pay his doctors, viz. at the end of two months, this respected father of a large family fell into the arms of one of his daughters, and almost instantly expired.

Contrast with this case the following:—

A medical gentleman, in the 77th year of his age, of spare habit and temperate life, had the misfortune to be struck on the shin by the wheel of a wheel-barrow, producing contusion and excoriation, perhaps not quite so severe as in the former case, but in the estimation of the lady, who had been an eye witness and sedulous nurse to the patient, her father, she considered the two injuries as very much resembling each other. In this case the part was first covered with a pledget of lint well wetted with spirit of turpentine, and as soon as it could be procured, viz. in about half an hour, the wound was neatly dressed with a piece of gold-beater's skin. The patient did not refrain entirely from walking, but used the limb with moderation, and he had the satisfaction, greatly to the surprise and astonishment of the lady, to show her, day after day, through the transparent gold-beater's skin, that every thing went on kindly and pleasantly, no second dressing being required. This accident was scarcely got well when the same gentleman was unlucky enough to strike the shin of his other leg against the sharp edge of a brick-wall, and notwithstanding he had on a pair of cloth gaiters and worsted stockings, the injury was rather more severe than in the preceding case; but happily, by the same simple treatment, the same happy result followed, and the patient perfectly recovered without having suffered either much pain or confinement. It is scarcely necessary to mention the surprise of the lady, who was deeply interested in both cases.

I shall now, Sir, with your permission, add a few observations on the more *dangerous* cases of *contaminated puncture*.

Riding one day, about thirty years ago, across Enfield Chace, my friend, Mr. James, informed me that I was come in right time, as one of his labourers had just been bitten by a viper. I found the

man very properly sucking the wound. For greater security I raised the common integuments of the bitten part, and cut away as much as I could suppose to have been in contact with the poison. I then took the man to the pump, sluicing his hand with cold water several minutes. The part was then dressed with simple cerate, and as I never heard from him a second time, I take it for granted the wound healed without any unpleasant circumstance.

During an active general practice of 30 years I had many cases of persons bitten, or thought to have been bitten, by mad dogs, with every one of whom I followed the same method, allowing the patients to take the Ormskirk, or any other medicine. The consequence was that, during those 30 years, I never saw a case of hydrophobia till, on my retirement to Bath, I witnessed one in the Casualty Hospital, under the care of that excellent practical surgeon Mr. Norman, jun. I think that hydrophobia must have occurred in some of the numerous cases which I have mentioned above, if excision of the contaminated parts had not been used.

Every medical man in London must recollect the case of a carpenter, who, two or three years ago, had the misfortune to be bitten by a rattle-snake exhibited as a show. What particular treatment was adopted I do not know, but believe I am quite correct in saying, that excision of the contaminated part, the one thing needful, was neglected, and the patient consequently deprived of every chance for a favourable termination.

A respectable lady, about 40 years of age, apparently in good health, had the misfortune to puncture her thumb with the point of a skewer, whilst assisting her cook to truss a pheasant that had been long killed. The puncture was contaminated by the contact of the putrid entrails of the bird. The wound, I am told, was wrapped up in a piece of linen cloth wetted with brandy; in the course of the night it became very painful; the pain and inflammation continued to increase. I saw this patient, a day or two preceding her death, in consultation with Mr., now Sir Astley Cooper, Bart. If excision had been here early practised, in all probability the wound might have healed kindly. The patient died, I think, on the 10th day, under an accumulation of fatal appearances, inflammation, fever, mortification, and convulsions. There can be little doubt that the hands would be washed after the putrid contact, but it is presumed that the thumb, from a dependence on the brandy and binding up, would escape that effectual ablution which seems necessary in all such cases. It is perhaps impossible, after all, when once the sentient living fibre has been contaminated, to completely remove the fomes of disease by washing alone, I therefore insist upon the additional guard of excision. The early treatment of this lady's case consisted in warm poultice and fomentation.

Contrast with the last case the following:—

My much esteemed friend and neighbour, Mr. Astbury, in the ardour of his post-mortem investigations, pricked his finger, which, on the second day, began to be painful. There was a small, slightly elevated pimple, on the punctured part, with a barely perceptible appearance of matter at the point of the pimple, from which streaks of inflammation were extending up the back of the hand and wrist. I raised the integument and pushed a lancet underneath it, so as effectually to remove the contaminated part. The excision caused much smarting, but the character of the pain seemed immediately to differ from what it had been previous to the excision. The finger, the palm of the hand, back of the hand, and wrist very speedily ran into suppuration, notwithstanding bleeding, leeching, and other antiphlogistic treatment; but from the time of the excision, the inflammation, which was extending itself rapidly up the arm, seemed to have been arrested. Mr. A. believes, and I am of the same opinion, that if the excision had not been adopted, the inflammation would soon have extended itself to the shoulder and pectoral muscles. Mr. Charles Bell was consulted in this case, who approved of the saturnine lotion, which was continued with the addition of opium. After suppuration was completely established, it is proper to mention that warm poulticing contributed to the patient's relief, who is thankful to have escaped with no other inconvenience than an anchylosed finger; more especially as this case almost immediately followed the distressing one of the late much lamented Mr. Pett, who had not the benefit of excision.

Amongst the multitude of your readers, Mr. Editor, I am aware that there may be many who may think much, that has been here advanced, might have been spared; but I am at the same time certain there are many others who may profit by the discussion.

Before I conclude I must crave your indulgence, whilst I advert to a species of contamination of puncture, or wound, which is much less generally known, or

suspected, than any to which I have called your attention. It must, I think, have been observed, by almost every surgeon, that there are many persons whose skins are very impatient of every resinous adhesive plaster. Let us, for a moment, suppose that a person of this description has the misfortune to have a wound, or puncture, made by a clean instrument. The surgeon, by the aid of straps of adhesive plaster, draws the lips of the wound neatly into contact, and he expects to obtain a cure by the first intention. There will always be some degree of uncertainty whether the disposition of nature to heal by the first intention, or by suppuration, shall prevail. Here then we have a right to expect that the irritation and stimulus of the resinous plaster will, in those particular constitutions, take the lead. The disposition to suppuration will prevail over the adhesive tendency, and the common integuments being a congeries, or fine woof, of capillary nerves, veins, arteries, absorbent and excretory vessels, and muscular fibres, all endowed with life and exquisite sensibility, the fire is lit up, which very speedily propagates itself into all the fatal consequences which have been of late too often observed. I do not positively assert that the late unfortunate case of Hammond, in Saint George's Hospital, was thus excited, but I am inclined strongly to suspect that the resinous adhesive was the original fomes of the suppurating process. Surgeons would do well, I think, were they in future, when they adopt the neat and often successful union, by what was formerly absurdly denominated the dry suture, always to guard the lips of the wound from coming in contact with the resinous adhesive, more especially if that plaster owe its adhesive property to burgundy pitch; a narrow slip of gold beater's skin, dry lint, or old cambric spread with the emplastrum plumbi, would answer the purpose; and if once in fifty, or one hundred times, it obviate the suppurative stimulus and tendency, it will amply repay the surgeon for his trouble and attention.

I trust, Sir, you will not think me too prolix if I go on and notice that, in one of the monthly periodical medical publications, there is a most interesting case of Wr. C. Callow, Esq. surgeon to the 96th regiment, who received a small puncture in the thumb, from a spiculum of bone, whilst the hand was immersed in purulent matter, during a post-mortem examination. The following quotation from this distressing and very interesting case will be much to our present purpose. "But this was an accident, the occurrence of which had been several times repeated, without any unpleasant results, in former morbid examinations; the present instance scarcely excited notice. The succeeding day was one of much bodily fatigue, preparing to leave the regiment for a few days on a hurried visit to London. The journey commenced by mounting a stage-coach at five o'clock that evening. At midnight, without any premonitory symptom, acute pain was felt in the puncture, immediately succeeded by a shivering fit.

"The fact of absorption was now evident, and anxiety excessive. Immediate remedies being requisite, the situation in the midst of a journey became perplexing. Two measures only offered for selection, either to descend at the first inn, and have recourse to strangers, or to proceed fifty miles further, where, fortunately, the residence of relations and friends offered greater facilities, and rendered success much more probable: the latter alternative was adopted.

The period required to reach this wished-for asylum, was one of extreme mental anxiety, and acute bodily suffering; the thumb and three first fingers momentarily becoming more painful, with the most violent rigors rapidly succeeding each other."

I congratulate the sufferer and his friends on a recovery, however tedious and imperfect, but I conceive it to be my duty here, as a public writer and adviser, to record my opinion that if, in the very first instance of feeling acute pain, or any pain in the puncture, Mr. C. had taken out his lancet and removed the contaminated portion of the integuments, he would have arrested the progress of the venom, and greatly lessened, if not wholly subdued its subsequent virulence.

This interesting case also affords powerful motives for every dissector in future to consider the slightest scratch received in the same way, as a thing of great consequence. A lancet is always ready, and a pump of cold water seldom far distant, where every portion of morbid virus may be instantly cut and washed away, and the contaminated puncture converted into a clean and slightly incised wound.

It may be proper here also to remark, that the large crooked needle (that abominably awkward tool, which surgeons generally employ in sewing up dead bodies) should be completely discarded, and one adopted, shaped like the common packing needle, which, with fine twine in preference to thread, will always expedite the business, with security from the vacillating motion of the

crooked needle, in a hand already much fatigued, and slippery with the fluids of the body.

On the subject of simple puncture it might have been added, that the early application of dossils of lint, wetted with spirit of turpentine, is the best preventive of locked jaw. It seems extraordinary that the spirit of turpentine, yellow resin, and burgundy pitch, which are all apparently nearly related, should differ so much as they do in their effects on a recent cut or puncture. The spirit scarcely ever fails to act as a soothing sedative; the others are frequently both irritating and stimulant.

If these observations have any merit, the Editor of THE LANCET may be fairly said to have called them forth by the paragraph which forms a motto to this communication, taken from notes that have been long treasured up by the writer, who will now be gratified by the prospect of their being much more generally read and useful, in the widely circulating pages of THE LANCET, than in the author's own more limited work *The Medical Spectator*, for which they were originally intended. ***.

Enfield, Sept. 16, 1825.

REVIEW.

ABUSES IN THE LONDON ROYAL COLLEGE OF SURGEONS.

An Address to the Members of the Royal College of Surgeons of London, on the injurious conduct, and defective state of that Corporation, with reference to their Professional Rights, Medical Science, and the Public Health. By JOHN ARMSTRONG, M. D. Lecturer on the Principles and Practice of Physic, and Consulting Physician to the London Fever Hospital. pp. 48.

THE LANCET, *April* 24, *May* 1, *May* 15, *May* 29, and *Oct.* 9, 1824; *Jan.* 1 and 22, 1825.

WE have already stated, that we see no reason whatever to doubt the purity of Dr. Armstrong's motives, in endeavouring to direct the attention of the Profession to the abuses of the College of Surgeons, and especially to the infamous bye-law, which has been so frequently the subject of discussion and indignant animadversion in the pages of THE LANCET; but we cannot help thinking that the Doctor has not taken a very sound view of the general question, and that the time which he has selected for the expression of his opinions is not particularly seasonable. We entirely discredit the imputations which have been cast upon Dr. Armstrong by a number of our Correspondents, who have not hesitated to declare, that private and interested motives have had as large a share in inducing him to come forward, on the present occasion, as his friendship for Mr. Bennett, or his desire to promote the interests of the profession. Neither do we attach the smallest importance to the querulous objection, that it is inconsistent with the character and dignity of the Members of the College, that a Physician should become the voluntary champion of their rights and interests, and, at an alleged sacrifice of comfort and pecuniary advantage, espouse the cause of a branch of the profession to which he does not belong. If Dr. Armstrong had been the first to point out the injurious effects of the bye-law, or if the views which he has taken of the question had been as unexceptionable as his motives, we should have thought his claims to our gratitude rather enhanced than diminished by the circumstance of his belonging to a branch of the medical profession not directly interested in the correction of the existing abuses.

But while we give the Doctor every credit for the excellence of his intentions we think his Address ill-calculated to promote the main object, which, in common with every friend to medical science, he professes to aim at—a reform in the constitution of the College of Surgeons.

He has taken too narrow and partial a view of a question which affects, not merely the character and pecuniary emoluments of a few excluded individuals, but the rights and interests of the whole medical profession. He has devoted a great portion of his pamphlet to a minute detail of the professional history of Mr. Bennett; he has insisted upon the exclusion of Mr. Bennett, whom he represents as one of the ablest and best of men, as a main ground of objection to the bye-law; and, finally, he has exhorted the Profession to try its validity through Mr. Bennet, and to make that gentleman's cause their own. Now this course we take to be extremely injudicious.

Of Mr. Bennett, we meant to convey nothing disrespectful, when we implied last week what we now distinctly assert, that he is unknown to the Members of the College. He may possess all the talents and accomplishments on which Dr. Armstrong dwells with friendly minuteness, but he is unknown to the great body of the profession; and although he has undoubtedly an equal right with every other member of the profession to complain of the oppressive and injurious operation of the bye-law, his exclusion cannot be made a specific ground either for trying its validity, or applying to the Legislature for redress, without risking the success of the common cause. If, indeed, Dr. Armstrong had been desirous of citing a striking instance of the injustice as well as impolicy of the conduct of the College of Surgeons, he might have adverted to that infamous enactment, which in effect deprived students of the benefit of attending summer courses of lectures on anatomy, and thereby attacked a third part of the income of Mr. Brookes, a gentleman whose great reputation and talents, as a teacher, had been recognised for upwards of twenty years, during which time his certificates were received without qualification by the Court of Examiners. But there is this objection to insisting on cases of individual hardship, instead of relying on arguments drawn from general policy and expediency, that it becomes the interest of the College to redress the particular grievance, and the interest of the individual, as soon as his own ground of complaint is removed, to acquiesce in the general wrong. Men seldom resist oppression with much vigour when they cease to be the objects of it, and they are apt to bear with surprising fortitude, if not with indifference, the sufferings in which they no longer participate.

There is one passage in Dr. Armstrong's pamphlet, to which, as it affects our own character as vigilant and independent journalists, we think it incumbent upon us to advert. "It is but justice," he says, "to state that the first appearance of this bye-law in print was followed by the general disapprobation of the profession, and though but *one journalist* warmly protested against it at the time, yet probably nothing but the persuasion that it would remain a dead letter, restrained many of the Members of the College from the public expression of their sentiments."

We presume that THE LANCET is the journal to which Dr. Armstrong alludes, and we have the stronger reason for this presumption, as we recognize several of our own observations and arguments in other parts of his pamphlet; but as the Doctor has not thought proper to name THE LANCET, we beg leave to advert a little more distinctly to the part which we have taken in the discussion of this question, from the first appearance of the bye-law.

No sooner was the series of Resolutions (among which was the bye-law in question) promulgated, than it was no-

ticed in THE LANCET in the following terms:—

"The following Manifesto has just issued from the College of Surgeons, and, like every other production from the same quarter, is crammed with grammatical blunders.

Who hold the reins of government at the College we know not; but this we know, that they are taking the most decisive steps to bring the whole of the practitioners of surgery into the utmost contempt. Here, probably, we are committing an error, for surgeons are rather bringing themselves into the most humiliating and contemptuous dilemma, by quietly submitting to the iniquitous, imbecile, and injurious laws enacted by such men as Sir *Fretful* Blizard, *Cantwell* Chevalier, and *Mesdames* Forster and Lynn."

In THE LANCET of the 1st May, 1824, appeared, among others, the following observations:—

"The profession should petition that the Council, Curators, and Examiners of the College *be elected to their respective offices by the Members*, so that each Member may have a voice in the election of those persons who are to regulate the proceedings of that College, in the prosperity of which he must feel a personal as well as a national interest. If the Examiners of the College had been thus elected, we feel confident they never would have attacked private property—they never would have outraged common sense—never would have been guilty of such injustice to their fellow lecturers—never would have offered such an insult to the surgical profession, and to society in general, as they have done in the instance before us.—We confidently anticipate that surgeons will no longer quietly acquiesce in the abrogation of their rights, but will now spiritedly advance and defend their privileges against the tyrannous encroachment of this *Hydra* College.

If practitioners on this occasion do but resolve on those decisive measures their duty imperatively calls upon them to adopt, and promptly petition the Legislature, it will be impossible that the Examiners of the College can maintain their ground, for they will necessarily be compelled to submit, either to some legal enactment, or to the equally potent influence of public indignation."

It will be recollected that, at the time we recommended an *immediate* meeting of the profession, Parliament was actually sitting, and a petition founded upon any resolutions adopted at such a meeting might have been without delay presented to the Legislature. The grounds on which we consider a meeting objectionable at the present moment are, first, that full three months must elapse before a petition can be presented to Parliament; and, secondly, that the whole question will come with less effect before the Legislature, if an individual case of hardship, rather than the general injury sustained by the profession and the public, from the unjust and oppressive conduct of the Court of Examiners, be made the foundation of a petition.

We extract a few passages from another article which appeared on the subject of the college bye-law, in THE LANCET of May 15, 1824:

"Sound chirurgical knowledge will be promoted by affording an inducement to men of talents and genius to enter the profession, and become surgical or anatomical teachers; an inducement which this measure has entirely taken away. If this regulation had existed seventy years ago, one of the brightest ornaments of the profession* would probably have been prevented from becoming a teacher, and the good which mankind has derived from his labours have been lost. This measure is calculated to deter men of talent from embarking in a profession the chief honours of which are to be awarded to some dozen individuals who obtain their situations through private influence, and some, without one single claim to justify their election. Many who have already embarked in it will be compelled to give up the idea of pursuing a particular branch of it in which their labours might have been usefully employed."

In THE LANCET of May 29th, we returned to this subject; and after having examined the legal bearings of the question at considerable length, we again exhorted the profession to meet for the purpose of petitioning Parliament. We sub-

* John Hunter.

join an extract from the article of that date :—

"We some time since recommended the profession to petition Parliament to abrogate the present, and grant them a new charter, which might so constitute the College, that the persons, having the power of making bye-laws should be elected by the whole body of the members of the College.

This recommendation we now most earnestly renew. Such a measure will be equally necessary, whether these odious bye-laws are put into execution, or annulled either by the Chancellor's and Judges' refusal to confirm them, or by the Examiners themselves. For, as the College is at present constituted, it is not in the nature of things that any measure beneficial either to the profession or to society at large can emanate from it. It is an invariable law of human nature, that every man will, if he can, promote his own interest in preference to that of others; we may deplore the existence of this law; we may endeavour to hide it from ourselves; but we cannot alter it.

Wherever the power of making regulations for the government of a large number is placed in the hands of a few, this few can only be prevented from employing that power to promote their own sinister interest by the control of the large body. The only security we can have that they will exercise their power for the general benefit, is their being both elected and removable by those whom they are to govern. The two bye-laws we have been considering are proofs, if proof were necessary, of the truth of this proposition."

What was the language held by THE LANCET at the commencement of the Medical Session in October, 1824?

"The effect of the recent law of the College of Surgeons, is to destroy all competition between surgical teachers, and to oppose insuperable obstacles to the advancement of medical science, and we will never cease to hold up the conduct of that benighted body to the contempt of the profession, until we shall have effected its repeal."

Again, so late as last January (vol. vi. p. 90.) after quoting the obnoxious bye-law, we expressed ourselves in the following terms:

"Read this last regulation again and again, and curse it with each reading; curse the man who framed it, and curse the men who adopted it; let the College Examiners be henceforth spoken of only in conjunction with deeds of infamy, arrogance, injustice and folly, let them be held up to public reprobation, and universal scorn."

We have felt it necessary to recal these passages to the recollection of our readers, that we may not be supposed to have been unmindful of the duty which we owed to the profession, as independent medical journalists, at a time when their rights and privileges were assailed by the iniquitous enactments of a corrupt and mercenary Corporation.

We have stated our objections to the time at which Dr. Armstrong has recommended a meeting of the profession, and to the narrow ground on which he has mainly rested his opposition to the conduct of the College. If, however, a meeting of the profession should take place at the present moment, there are two points which we most earnestly press upon their attention; first, to beware of packed committees, and secondly, not to suffer themselves to be ensnared into the adoption of any half-measures, such as a remonstrance to the College, or a resolution to try the legality of the bye-law; in fact, to consent to no proposition short *of a Petition to the Legislature for* a New Charter, with new provisions.

We understand that in case a committee should be appointed for the purpose of effecting a reform of the College abuses, several Hospital Surgeons have offered their services; let the Profession beware how they accept them. If a Committee, composed of Hospital Surgeons, should be appointed, a reform of medical abuses will be about as probable an event as a reform of the Court of Chancery under the auspices of a commission composed of men who have fostered and fattened upon its corruptions.

We have reason to believe that Mr. Lawrence will consent to take the Chair

whenever a meeting shall be called for the purpose of carrying into effect the measure which we have so often recommended to the adoption of the Profession. Mr. Lawrence is indeed a Hospital Surgeon, but the objection which we have urged against a *Committee* composed of Hospital Surgeons can scarcely apply to that gentleman. As *Chairman* of the Meeting, the eyes of the whole Profession will be turned towards him, and the station he will thus occupy would afford a sufficient guarantee for the independence of his public conduct, even if a far stronger security were not to be found in his own high character, and in the dictates of his own liberal and enlightened mind.

FOREIGN DEPARTMENT.

ANALYSIS OF FOREIGN MEDICAL JOURNALS.

Description of an Hermaphrodite.—By PROFESSOR MAYER, *of Bonn.*

The case about to be described is that of a child six months old, who at that age died of convulsions. I had opportunities of seeing the child frequently; until within a short period of its death, it appeared strong and lusty and well nourished. The general appearance of the child, the form of the pelvis alone excepted, presented no feminine peculiarity. The external parts of generation were formed in the following manner.

There appeared to be a considerable projection of an unnatural growth from beneath the symphysis pubis, which, from its length and size, I could not decide upon considering as the clitoris, especially so, as under it there was a very firm opening, from which, as well as from the proper urethra, the urine made its exit, and no trace of a vagina could be discovered, for I could not regard the small orifice I have just mentioned as such, which was only of the circumference of a small lentil; on each side of the orifice were too thick folds of skin, just such as would be formed by dividing the scrotum into two parts; in them, however, no testicles were perceptible, and it was conjectured, that although they had not yet descended that they might descend. I gave it as my opinion from the appearances, that the child might be correctly termed an *Hypospadiäus*;* and in doing so repeated my opinion as to the probable descent of the testicles into the scrotum. After the death of the child, I obtained the pelvis with its surrounding parts through the kindness or Dr. Reanmont and Surgeons Gunther and Metz of Aix-la-Chapelle. I examined with great labour and perseverance the parts, and was at last recompensed for my trouble by being able to solve the obscurity of the case. I have in the following pages entered upon a more minute description than I published in my first notice of this case, which was published in the *Salzburgher Med. Chir. Zeitung.*

The attention was, on the first sight of the parts, immediately attracted towards *two oval bodies*, lying opposite to the outer abdominal rings, and external to the pelvis. These by a little dissection were laid quite bare, and were therefore easily examined. Their form and situation led to the conclusion that they were the testicles, and this opinion received an additional support from the fact, that there was a well-formed *tunica vaginalis propria testiculi*, in the cavity of which the testicle, or what I shall at present assume to be the testicle, was formed. The length of the oval body on the right side measured four lines, it was a line and half in breath and two lines thick. The body on the left side was smaller, being only two lines long, a line and half broad and the same in thickness; both were in external appearance similar to the testicles of a newborn child. The great difference between these and the usual appearance of the ovaries of a female infant, was principally in the figure, the latter being long and flat, whilst these were oval and somewhat cylindrical. They possessed a considerable degree of firmness of texture, and were surrounded by a thick envelope, very much like the *tunica albuginea testiculi.*

A transverse incision through this structure made its fibrous arrangement yet more apparent. The parenchyma or the substance of the body appeared to be made up of yellowish white fibres. The Graafian vesicles, as they are usually

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* A term frequently used to denote an imperfect development of the genital organs, derived from ὑπο and σπαω, from which comes also our old English word to *spay*, the meaning of which is sufficiently understood.—ED.

named, were sought for, but could not be found, either on the external surface or in the centre of the part, the transverse incision having been extended through the part for the purpose of examining it. On the left side was a substance which might be compared to to the epididymis, which was about the size of a lentil, so that from their figure, situation, envelopes and texture, they might be deemed to resemble testicles more than ovaries. However justly this view of the case appeared to be formed, it could not be confirmed by an examination of the internal parts; a glance at the internal surface of the pelvis, its spaciousness, the inclination of the sacrum, seemed to speak out more of the feminine configuration; and a little further examination discovered the uterus, which was well formed, floating in the midst of the pelvis. It was one inch and two lines (2-12ths) in length, four lines in breadth at the fundus, and had a flat anterior and a convex posterior surface. Its parietes were a line in thickness at the fundus, and a line and half at the cervex; the cavity of the uterus was of the natural triangular figure. In the angles of the fundus the orifices of the Fallopian or uterine tubes were seen, and on the inner surface of the neck of the uterus the plicæ arbusculæ could be distinguished. The mouth of the uterus projected into the vagina and had a large anterior and a small posterior lip; but before we proceed to describe the vagina, it is better to observe the manner in which the appendages of the uterus were constructed.

There was a ligamentum latum and a ligamentum teres; the latter, as is usual, passed through the internal abdominal ring outwards; but no ovaries could be found in the pelvis. After a very minute search, the tubes passing from the uterus along the upper part of the broad ligament were discovered, and were without doubt the Fallopian. The course of the tubes was traced from the uterus, at which place it was so small as scarcely to admit of the introduction of a bristle; it became a litle broader as it continued its serpentine course, and then, instead of terminating in the usual fimbriated manner, passed out of the abdomen through the internal ring, and terminated near to the aforementioned structure in the groin by a blind pouch, which was made the more certain by the injection of quicksilver into it from its upper part. Thus was the fimbrian tube found on both sides. The ligamentum ovarii, which goes from the ovarium to the fundus uteri, was naturally formed. The both surfaces of the Fallopian tubes appeared to be formed as usual. The bodies which I have described as being situated in the groin, were the only structures which bore any resemblance to the male organs of generation, if I except the clitoris to be hereafter mentioned; that is to say, there were no vasa deferentia or vesiculæ seminales. The vesica urinaria, the rectum, and the other parts contained in the pelvis, were in their natural state.

We now return to the description of the vagina, and the external parts of generation. The length of the vagina in the pelvis measured eight lines, its breadth or diameter from one side to the other, was four lines and half; on its inner surface were several transverse rugæ or rather the rudiments thereof, and the commencement of the columna anterior and posterior, was visible. The vagina passed forwards with the natural degree of curvature, until it reached just beneath the symphysis, and there it suddenly turned upwards, so that the opening into it was so small as scarcely to admit of a small probe of the size of a knitting needle to be introduced into it, but when introduced it could be readily passed into the opening before spoken of, situated just beneath the supposed penis. The vagina gradually contracted, and followed the course of the urethra upwards, so that the orifice of the former was just as small as that of the latter, nay was even smaller than that of the urethra itself. The both openings were surrounded by circles of soft skin. The penis or clitoris, if it may be so called, now remains to be mentioned. The length of the clitoris with the prepuce measured twelves lines, it was six lines in thickness. The thickness of the prepuce was very remarkable and the glans was separated by a fissure or groove to its opening, so that the glans was split into unequal prominences, the left of which was rather larger than the right, in consequence of the groove taking a little turn toward the right. The groove also curved downwards towards the upper opening, which it is probable was the opening of the urethra separated from the vagina, but there was nothing like a canal in the body of the glans itself. The situation of this structure is just that occupied by the female clitoris, and the commissure of the labia majora forms over it. Of the nymphæ nothing very remarkable can be observed; the prepuce gave off a fold of skin, which bore some resemblance to the right nympha.

This then is a simple anatomical description of a very curious case, which must be acknowledged as one of an hermaphrodite character, in which the resem-

blance to the female parts of generation is predominant. The principal points in which the case resembles the genital parts of a male infant, are first, the folds of the skin on each side like a split scrotum; secondly, the length and thickness of the clitoris and prepuce; and thirdly, the existence of the two oval and somewhat cylindrical bodies lying external to the abdominal ring, as if in their descent into the bag or scrotum; whilst on the other hand the uterus, the Fallopian tubes, and the vagina, with the greater capaciousness of the pelvis, all give unquestionable proofs of the greater predominancy of the female sex. Many such cases have been recorded by Meckel, Oscander, Tiedmann, and others; and Dr. Mayer informs us that he has, in the anatomical museum of Bonn, several preparations of this kind.

Extirpation of an entire Uterus, by Laud Wolff, of Celle in Hanover.

In the latter part of April, 1824, I was requested by Dr. Bergmann to visit an insane woman, in the mad-house of this town, who had a prolapsed and incipient carcinomatous uterus, and to report my opinion respecting it. The patient had been for a long time insane, and she spoke frequently with great vehemence on obscene subjects. She was sixty years of age, of an athletic form, and had coarse masculine features, and a sallow complexion. The uterus was entirely prolapsed, it protruded from the vagina and drew a part of the vagina after it. The cervix uteri was scirrhous, and on its posterior surface were several small carcinomatous ulcers. The vessels were hard, knotty, varicose, and full of blood, and were so distended about the orifice of the uterus, as to make it appear much larger than its natural size.

From the orifice of the uterus, when pressure was applied upon this enlarged mass, a light yellow coloured discharge came out. The parietes of the vagina were dry, hard, and insensible, and covered with branny-like scales. On account of this state of the parts, the question to be considered was, what process of treatment is most applicable? Is it better to attempt to return the uterus, to cut off the neck, or must the whole of the uterus be removed? After noticing the history of the case, (which, by the bye, is very imperfectly given) and taking all circumstances into account, he was led to consider the removal of the part necessary, an operation which the success latterly obtained by Langenbeck, Seibald, and others, appeared to justify and to encourage. On the 15th of May, 1824, Surgeon Wolff performed the operation in the following manner. The patient was first placed in the delivery chair, made according to Oscander's plan, and then properly secured by a sufficient number of assistants. It should have been before said, that in the morning, the bladder and rectum were perfectly emptied, in order to diminish the risk of injuring these parts, in the after steps of the operation. The labia and sides of the vagina were separated by two assistants, one putting his hand on each side and thus drawing the parts outwards as far as they would permit. I then took hold of the protruded mass of uterus with my left hand and drew it firmly forward, and taking a convex scalpel in my right hand I made a transverse incision through the fore and upper part of the vagina about an inch anterior to its junction with the uterus, and having carried that incision as far round as the parts would allow, I then lifted up the parts which I had grasped in my hand, and by a careful dissection separated them in a like manner behind, so that by at times continuing the incision from before to behind, I succeeded in reaching the upper part of the uterus, and with the attached vagina and surrounding organs had nearly removed it; another incision carried the knife into the cavity of the peritoneum, as the escape of a considerable quantity of serous fluid sufficiently proved. The incisions were now lengthened somewhat laterally, by which the both ovaries and the Fallopian tubes were reached and removed with the body of the uterus.

We are informed that the parts were thus removed; that the vagina was replaced, and that the wound was secured by a single suture; that a styptic powder sprinkled on lint was introduced into the vagina, and the whole of the apparatus secured by a T bandage. The vagina was dry and husky, and when it was cut through the patient betrayed no signs of pain. The most painful part of the operation, judging from the struggles and cries of the patient, was the drawing down and the removing of the ovaries and connecting parts. The quantity of blood lost during the operation did not exceed eighteen ounces. The patient took after the operation one grain of opium, which had the effect of procuring a sound sleep for four hours. A slight hæmorrhage succeeded to the operation from which no ill consequences were produced and it did not continue for any length of time.

May 6th. The night was passed in a tolerable quiet manner, she complained of

thirst, her skin was very hot; her pulse quick and hard from 90 to 100, and toward morning she became very restless. During the following day the pain in the abdomen extended itself; the anxiety and restlessness became greater, and in fact all the signs of internal inflammation became more conspicuous. She was ordered to take an emulsion composed of nitre, oil of hyoscyamus and camphor. Mercurial ointment was rubbed in freely. The pain and tenderness of the abdomen were not diminished but increased in the course of the day; the night was spent in a state of great agitation and restlessness; the breathing difficult; the pulse quicker; and the skin frequently hot. On the morning of the 17th a profuse clammy perspiration broke out, proceded by vomiting, which continued for some time, soon after which she expired.

Inspectio cadaveris. The pleura and lungs were found inflamed, but particularly the pleura, on which were several patches of lymph deposited. The peritoneum lining the abdominal muscles, as well as that covering the intestines, was also inflamed, and the treatment adopted by Laud Chirurgus Wolff and his colleagues was not such as might be expected to check the violent inflammatory action which must have been evident enough, which was even confessed to have been present. The two great defects in the narration of this case, are the imperfect history preceding the operation, and the imperfect account which succeeds it. The therapæia was as bad as could be.

Cæsarian Section, by Laud Wolff.

The description given by Laud is so disjointed and so badly expressed, that we cannot attempt a translation of what has been written. The particulars are briefly these. The patient was twenty-six years of age, deformed by rickets. She was in labour when the surgeon was called to her. The conjugate diameter of the pelvis was *two inches and a quarter*, and the straight diameter two inches. The orifice of the uterus was dilated about the size of a crown; the operation was performed on the 24th of May, 1825, in the linea alba; the incision extended from the umbilicus to the symphysis pubis. The child was extracted alive, and on the 26th of the same month both mother and child died. It may be sufficient to say that the treatment adopted was inert and useless, and we only deem the case worthy to be mentioned, to place on record the fact of the operation having been performed.—*Graefe' Journal der Chirurgie, und augenheilkunde. Siebente Band—Drittes Heft.*

HOSPITAL REPORTS.

GUY'S HOSPITAL.

Case of Inguinal Hernia.

——— a woman of about 20 years of age, and of florid complexion, was admitted into the Hospital on Wednesday, Sept. 14th, under the care of Mr. Morgan, with swelling of the right labium pudendi, and purulent discharge from the vagina.

The patient being placed in bed, soon after her admission, the swelling was more minutely examined, and Mr. Morgan was of opinion that it was inguinal hernia. The patient stated that the swelling had existed upwards of four months, and that it was not painful. The tumour was about the size of an hen's egg; it had an elastic feel, and the integuments covering it were not discoloured, nor painful or tender upon pressure. The act of coughing communicated an impulse to the tumour, and it may be important to mention that the bowels had been evacuated on the day she came into the Hospital, but she said that she was habitually costive, and frequently took castor oil.

With respect to the purulent discharge, it was thought to be gonorrhœa, and the copaiba mixture was ordered to be taken three times a-day. The patient was seen by Mr. Key and Mr. Callaway, and there now appeared to be some doubt with the surgeons as to the nature of the swelling. Inguinal hernia, *said* one, femoral hernia, *thought* another, whilst a third *suggested* that *it might be* an enlarged gland; all, however, agreed in one opinion, that no symptoms were present indicative of strangulated hernia. In the course of the investigation, the tumour was of course much handled, not only by the surgeons, but by the dressers and pupils, and this handling occasioned a degree of tenderness in the part.

On the following day (Thursday) the patient was seen by Sir A. Cooper (the great resolver of all doubts.) Sir A. was of opinion, that it was oblique inguinal hernia, taking the course (as he remarked) of the ligamentum rotundum. The process of examining the tumour was again repeated by the surgeons and a great number of pupils. Since yesterday it had become more tender, but it was not increased in size. The countenance was quite natural; there was no sickness or sense of constriction at the diaphragm, and the patient was free from sickness.

In the evening the patient was seen by

Mr. Callaway, and she complained of nausea and said that she had vomited once, but this was not seen by the nurse. There was tenderness at the lower part of the abdomen, and this swelling had now become very painful upon touch. Directed to take sulphate of magnesia, two drachms, in peppermint water every two hours, and an enema of castor oil to be administered directly.

16. The pulse this morning is quick and somewhat hard; tongue furred, and the patient still complains of nausea, but no actual vomiting has taken place. The tenderness of the abdomen and of the swelling has increased; the bowels had only been slightly evacuated by the enema. Mr. Callaway (in the absence of Mr. Morgan) ordered twelve leeches to the abdomen, a dose of calomel and colocynth to be taken immediately, the enema to be repeated, and the aperient mixture continued every three hours.

Evening. Pulse 84 and somewhat jerking; other symptoms much the same as in the morning. The bowels remain constipated and the nausea continues. The patient was directed to be bled to the amount of 10 ounces; two grains of calomel and one grain of opium to be taken after the bleeding. The copaiba mixture was directed to be discontinued.*

17th. The bowels remain constipated, tenderness at the lower part of the abdomen continues, and also of the swelling, which is not however discoloured. Nausea still remains, not amounting to vomiting; the countenance is natural, except from the expression of pain when pressing upon the tumour, and there is no sense of dragging down or constriction at the diaphragm. Pulse of the same character as last evening. Tongue slightly furred.

She was again bled from the arm, and the saline mixture with two drachms of sulphate of magnesia directed to be continued every three hours. At noon Mr. Morgan came to the Hospital, and, from a report of the symptoms, ordered the patient to be put in the warm bath and the taxis to be attempted. These measures, were complied with and the patient remained in the bath upwards of half an hour, during which time she became very faint, and although the tenderness of the abdomen and of the swelling itself continued, yet the taxis was employed for a considerable time; but, as might be reasonably expected, without producing any change in the swelling. After the soaking and kneading process, the patient was put to bed, and was then seen by Mr. Morgan, who considered there were no symptoms which indicated the necessity of an immediate operation, but intimated to the patient that it would probably be required. It was at length agreed to visit the patient again at the expiration of two hours. About half an hour after Mr. M. had left, there was a most copious evacuation from the bowels; but no change in the size or appearance of the tumour took place. At the appointed time Mr. Morgan visited the patient, and having learned what had occurred during his absence, the intention of operating was abandoned.

18th. The bowels have been several times evacuated, the tenderness of the swelling is not so great, but it is undiminished in size, being, to all intents and purposes, an *irreducible hernia*.

24th. From the period of the last report up to the present date, the patient has gradually improved. The tenderness of the abdomen continuing, it was thought proper again to apply leeches, which effectually relieved this symptom. *The swelling remains of the same size and character.* It may be considered as a truly fortunate occurrence for the poor woman, and, perhaps, for the surgical reputation of Guy's Hospital, that the evacuation from the bowels took place previous to Mr. Morgan's second visit. Had it not been for this timely event the patient would have been placed upon the table, in order to undergo an operation for strangulated intestine, when in fact *no strangulation existed.* Indeed, it is scarcely possible to conceive what could have led to the belief of a portion of intestine being strangulated. We cannot suppose the Surgeons of Guy's *Hospital* to be ignorant of the ordinary symptoms which characterise strangulated hernia. An attentive perusal of the symptoms of this case (as well as its termination) we think will suffice to prove that all the symptoms present might clearly be referred to peritoneal inflammation produced from the excessive handling of the swelling. The contents of the tumour (for it is an irreducible hernia) became inflamed, and to a certain degree the inflammation was continued to the abdomen, and consequently there was tenderness of the swelling and of the lower part of the belly, which came on in the evening of the 15th, after examination of the part.

On the following evening, (16th,) the

* Surely the continuance of this medicine, during a state of nausea, must have arisen from an oversight—copaiba is not a very suitable medicine for an irritable stomach.

tenderness had increased, and the pulse was somewhat hard. There was no actual vomiting (only slight nausea), neither was there any sense of constriction, as by a cord in the epigastric or umbilical region, and that peculiar anxiety of countenance so universally attendant upon it was wanting. It is reasonable to suppose that if a portion of intestine were strangulated, there would have been a progressive increase of symptoms, and that to an alarming extent in twenty-four hours. After a further lapse of sixteen hours, that is, on the noon of the 18th, it will be seen by the report, that the patient continued much the same. Had this been truly a case of strangulated hernia, the state of the patient would have afforded a melancholy exemplification of the last stage of hernia, and probably every symptom of gangrene would have been present. Such a termination, in cases of strangulated hernia, thank God, but seldom comes under our notice. In the present state of surgery they could only occur in the Gothic (or *barber*-ous) practice of such men as Joe Burns.

It will be seen that the patient at this time was placed in the warm bath, and the taxis attempted for a considerable time; after which the operation was proposed, and would have been performed had not the evacuation from the bowels occurred.

If an operation was considered requisite under the belief of a portion of intestine in this irreducible hernia having become strangulated, why was not the operation at once performed, without sending the patient to soak in a warm bath? The effect of repeated pressure in the employment of the taxis for upwards of half an hour, at a time when the parts were inflamed and tender, could only tend to aggravate the mischief.

The *supposed* strangulation, according to the opinion of the surgeons, had existed for many hours, yet it was thought proper to infuse the patient for about half an hour, and, after this process, to wait two hours longer.

We are compelled to say, the case throughout was treated with indecision; from an attentive observation of the origin and progress of the symptoms of this case, we were from the beginning of opinion, that no strangulation existed, and felt much surprise at the proposal to operate; but we leave the case without further comment.

Case of Injury to the Spine.

A poor Irishman was brought to the Hospital on Wednesday September 22d, about ten o'clock in the forenoon, and taken into the accident ward under the care of Mr. B. Cooper. The patient was a stout robust man, and the accident occurred by falling from a scaffold which was about the height of thirty feet from the ground. It was stated that in the act of falling he struck his back against one of the poles which supported the scaffold. When first admitted he was labouring under what are termed the *immediate* effects of a general shock given to the system; the heart's action was labouring and oppressed, the general surface and also the extremities were cold, whilst there was pallidity of the countenance, with shrinking and collapse of the features, and a state of stupor. In this state the patient continued upwards of two hours, at the expiration of which period, when we visited him, slight re-action had taken place, but the pulse remained exceedingly slow, the average number of beats 46—48. The lower extremities were completely deprived of the power of voluntary motion, and they were equally destitute of sensibility. The penis was partly erect, and there was a curious fact appertaining to this state of the penis—that only the cells of the corpora cavernosa were distended, whilst the corpus spongiosum was entirely free from distension, and felt lax in its whole extent; the glans penis was also flaccid.

In addition to the foregoing symptoms, there was slight tingling pain extending down the arms, but more especially of the right arm; the power of motion, however, was unimpared. The respiration was slow, and it could readily be seen that this was entirely effected by the diaphragm, unaided by the intercostal muscles. These symptoms could only be referred to injury of the spinal column, and a careful examination was instituted. Upon tracing the spinous processes there was no perceptible irregularity, unnatural projection or depression. About the spines of the 5th and 6th dorsal vertebræ, there was a crackling emphysematous feel communicated to the finger upon pressure, arising from extravasation of blood into the cellular membrane, but perfectly distinct from crepitus. There were several points in the spinal column at which the patient complained of pain when pressed upon, especially at the processes of the lower cervical vertebræ, and it was this part of the spine that Mr. Key expressed his opinion to be the seat of injury. As there was no perceptible fracture or displacement of bone, it will be seen that the only evidence as to the part injured consisted in a careful consideration of the symptoms which are

faithfully enumerated above. There was evidence enough of compression of the spinal marrow, and interruption to its functions; but whether such compression was from the pressure of bone or from the extravasation of blood of course was doubtful. Sixteen leeches were directed to be applied to the back, and a common enema to be administered. In the evening, the bladder being distended, the catheter was introduced; this symptom afforded another indication of the nature of the accident.

Sept. 23d.—There is considerable tumidity, of the abdomen arising from inflation; the penis is not distended, (this symptom did not continue many hours.)

The immobility and insensibility of the lower extremities continue; the pulse 56 and somewhat full, and the temperature of all parts of the body equal. The patient lies on his back and loudly complains at any attempt to move him; the functions of the brain are complete, and he complains of great oppression about the præcordia, which may probably arise from the incapability of fully expanding the chest. He was cupped this morning to the amount of 14oz.; the catheter is introduced night and morning, and a purgative enema was ordered to be given immediately and repeated in the evening.

24th. The poor man has become progressively worse; the pulse this morning is slow and feeble; tongue furred, but moist. He had no sleep, and says that he was chill during the night. He continues perfectly sensible, and is aware of his hopeless situation; the bowels were well relieved by the enema of last evening, and the tumidity of the abdomen is lessened. An enema of turpentine was given early this morning, which was retained. Mr. CALLAWAY directed a stimulating mixture, with ammonia, to be taken frequently, and port wine to be occasionally given.

25th. The patient complains of slight tickling cough, which is very distressing, inasmuch as the same want of power, which prevents him from fully expanding the chest by a deep inspiration, renders him incapable of *coughing out*, as it is termed, so as to throw off the irritating matter from the bronchial passages. The pulse is of the same character as yesterday, exceedingly feeble, and the paralysed state of the extremities unchanged. There appears to be now a slight difficulty in deglutition, although articulation is perfectly distinct. The enema was repeated last night, and again this morning.

Evening. There was that peculiar restlessness, which is so often the precursor of death, and to allay this, thirty drops of landanum were exhibited, and a few hours after a pill, composed of one grain of opium and a similar quantity of calomel, was given, which had the desired effect.

26th. A description of his present symptoms would only be an enumeration of the last struggles of a vigorous constitution contending against a fatal disease. Death closed this distressing and melancholy scene on the following morning at five o'clock. Such is almost the invariable termination of injuries of the spine.

An operation was spoken of, and only spoken of, for it could not be supposed, that without an accurate knowledge of the seat of injury, any surgeon would cut down upon the spine. It would be another "operation of exploration," was the remark of an intelligent pupil standing by.

A post-mortem examination of the body was made, but in a very loose and slovenly manner. From this imperfect examination we could not discover any fracture, but there was considerable extravasation of blood upon the posterior column of the spinal marrow, under the lower cervical and upper dorsal vertebræ.

ST. THOMAS'S HOSPITAL.

Case of Sloughing of the Penis.

John Hamilton, ætat. 18, of spare habit, was admitted into Lazarus' Ward on September 1st, under the care of Mr. Travers, with gonorrhœa and phymosis. He stated that the gonorrhœa was of about three months' standing, and the phymosis only came on within a few days. There was considerable swelling of the penis (although not so much as is frequently seen in these cases) with dark coloured inflammation. Around the edge of the prepuce were a number of small ulcers, constituting nearly a continuous line of ulceration. There was considerable febrile excitement accompanying this state of parts. Pulse quick, and tongue furred. The following plan was directed on the day after admission (September 2d.) Twelve leeches to be applied to the body of the penis, and afterwards the parts to be frequently fomented with poppy decoction, and the application of a linseed-meal poultice. A pill, composed of antimony, with one grain of opium, to be taken at bed time, and a

dose of saline aperient mixture every six hours.

7th. The ulceration of the prepuce has considerably extended, and the patient complains of much pain. He appears to be of an exceedingly irritable habit of body. Pulse quick and sharp. Mr. Travers directed him to be bled to the amount of 12 ounces, and, after the venesection, to commence with the following mixture:—

Hoffman's liquor, 1 *drachm*,
Camphor mixture, 1 *ounce*,

to be taken three times a-day. One grain of opium to be taken night and morning, and the treacle poultice* to be applied to the penis.

10th. The bleeding has reduced the sharpness of the pulse, but it still remains quick; the patient complains of much pain from the application of the poultice. The sore looks less sloughy, but has considerably extended. It is now about the size of half a crown, the principal part of ulceration being of the prepuce under the glans penis. The ulceration has gone on, as it were, eating away, and not with the rapidly-destructive progress which is too often seen in these wards from gangrene. The local applications were continued, and a 1-gr. pill of opium directed to be taken three times a-day.

12th. The dark coloured inflammation of the penis has increased; the pain from the poultice still complained of; the patient exceedingly irritable and restless. He was seen by Mr. Green, in the absence of Mr. Travers, who directed 12 leeches to be applied to the penis, and to continue in the use of his mixture and pills.

17th. The ulcer now appears to be rapidly increasing—the surface of the sore very sloughy, and the adjacent parts have that dark coloured inflammation indicative of a disposition to slough. Mr. Green directed the application of the *strong nitric acid* to the ulcer.

20th. The patient is certainly better; the disposition to ulcerate has been checked. The topical application, as might be expected, gave much pain, but the patient has been more free from pain in the part since its application.

24th. The black slough or crust occasioned by the acid has separated, and the surface of the ulcer on the upper part of the penis has healthy granulations; but at the under part the ulceration is going on. The greater portion of the prepuce is now destroyed, and at the under part the glans itself is in part destroyed. The dilute nitric acid lotion to be applied to the ulceration.

28th. The ulceration beneath has gone on destroying the glans, and making an opening into the urethra below the corona glandis. The patient complains of much pain, and, as before observed, is exceedingly irritable, being terrified at the idea of losing so important a member as the penis.

Mr. Travers directed the strong nitric acid to be again applied and the following medicines:

Subcarbonate of ammonia, 5 *grains*,
Musk, 5 *grains*;

to be taken in pepperment water every six hours, with the pill containing one grain of opium three times a day. After the application of the nitric acid the following liniment to be applied:

Extract of opium, softened with water to the consistence of cream.

* The treacle poultice is simply made of linseed meal, over which is poured some treacle; it is a stimulating application, and in many cases of sloughing sores, we have seen it of decided benefit.

NOTICE.

Mr. LAWRENCE's Lectures on the *Anatomy, Physiology, and Diseases of the Eye:* Dr. CLUTTERBUCK's on the *Theory and Practice of Physic*, and Mr. ALCOCK's on *Practical Surgery*, will be continued in our subsequent Numbers until each Course is completed.

ERRATUM

In Dr. BLUNDELL's *Introductory Lecture.*

In the 2d column of page 114, line 42, for "Richerand," *read* "Bostock."